Sunshine Act Meetings

Federal Register
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Wednesday, March 13, 1985

This section of the FEDERAL REGISTER contains notices of meetings published under the "Government in the Sunshine Act" (Pub. L. 94-409) 5 U.S.C. 552b(e)(3).

CONTENTS

1

FEDERAL MINE SAFETY AND HEALTH REVIEW COMMISSION

March 8, 1985.

TIME AND DATE: 10:30 a.m., Friday, March 15, 1985.

PLACE: Room 600, K Street, NW., Washington, D.C.

STATUS: Open.

MATTERS TO BE CONSIDERED: The Commission will consider and act upon the following:

1. Robert K. Roland V. Secretary of Labor, Mine Safety and Health Administration (MSHA), Docket No. WEST 84-46-DM(A). (Issues include whether the Secretary of Labor may be a respondent in the discrimination case.)

Any person intending to attend this meeting who requires special accessibility features and/or auxiliary aids, such as sign language interpreters, must inform the Commission in advance of those needs. Thus, the Commission may subject to the limitations of 29 CFR 2706.150(a)(3) and 2706.160(e), ensure access for any handicappted person who gives reasonable advance notice.

CONTACT PERSON FOR MORE INFORMATION: Jean Ellen, (202) 653-5632.

Jean H. Ellen,

Agenda Clerk.

[FR Doc. 85-6085 Filed 3-11-85; 2:12 pm]

BILLING CODE 6735-01-M

2

FEDERAL RESERVE SYSTEM

TIME AND DATE: 11:00 a.m., Monday, March 18, 1985.

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, NW., Washington, D.C. 20551.

STATUS: Closed.

MATTERS TO BE CONSIDERED:

1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204. You may call (202) 452-3207, beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

Dated: March 8, 1985.

James McAfee,

Associate Secretary of the Board.

[FR Doc. 85-6014 Filed 3-8-85; 4:35 pm]

BILLING CODE 6210-01-M

3

INTER-AMERICAN FOUNDATION

TIME AND DATE:

March 21, 1985—6:00-9:00 p.m.
March 22, 1985—9:00 a.m.-12:00 p.m.

PLACE: 1515 Wilson Boulevard, fifth floor, Rosslyn, Virginia 22209.

STATUS: Open.

MATTERS TO BE CONSIDERED:

March 21, 1985

1. The Chairman's Report
2. The President's Report
3. Approval of the Minutes of the Meeting of November 8-9, 1984
4. Review of the Consultants' Recommendations

March 22, 1985

5. Continuation of the Review of the Consultants' Recommendations
6. Report of the Audit Committee
7. Report of the Director for Administration and Finance
8. Board Travel
9. Costa Rica Country Plan for Funding and Monitoring
10. Other Business

CONTACT PERSONS FOR MORE INFORMATION: Robert W. Mashek, Secretary to the Board of Directors, (703) 841-3844; Charles M. Berk, General Counsel, (703) 841-3812.

Dated: March 11, 1985.

Alejandro J. Palacios,

Sunshine Act Officer.

[FR Doc. 85-6108 Filed 3-11-85; 2:42 pm]

BILLING CODE 7025-01-M

4

NUCLEAR REGULATORY COMMISSION

DATE: Weeks of March 11, 18, 25, and April 1, 1985.

PLACE: Commissioners' Conference Room, 1717 H Street, NW., Washington, D.C.

STATUS: Open and Closed.

MATTERS TO BE CONSIDERED:

Week of March 11

Monday, March 11

2:00 p.m.
Briefing by Staff on Use of Check Pilot Approach for Reactor Operator Requalification (Public Meeting) Moved from March 12)

Thursday, March 14

10:00 a.m.
Briefing on Further Actions on Source Term (Public Meeting)
2:00 p.m.
Discussion of Management-Organization and Internal Personnel Matters (Closed—Ex. 2 & 6) (Tentative)
3:30 p.m.
Affirmation Meeting (Public Meeting) (if needed)

Friday, March 15

9:30 a.m.
Discussion of Pending Investigation (Closed—Ex. 5 & 7) (postponed from March 6)
10:30 a.m
Discussion/Possible Vote on full Power Operating License for Waterford-3 (Public Meeting) (postponed from March 6)

Week of March 18—Tentative

Wednesday, March 20

10:00 a.m.
Discussion of Proposed Revisions of Part 35 (Public Meeting)
2:00 p.m.
Briefing by NUMARC on Status of NUMARC Initiatives (Public Meeting)

Thursday, March 21

2:00 p.m.
Affirmation Meeting (Public Meeting) (if needed)

Week of March 25—Tentative

Tuesday, March 26

10:00 a.m.
Discussion of Environmental Qualification of Electrical Equipment—Status of Compliance with Rule (Public Meeting)
2:00 p.m.
Discussion of Motion to Disqualify in TMI-1, Restart Case (Closed—Ex. 10)

Thursday, March 28

10:00 a.m.
Briefing on NRC Training in Foreign Countries (Public Meeting)
2:00 p.m.
Affirmation Meeting (Public Meeting) (if needed)

Week of April 1—Tentative

Wednesday, April 3

10:00 a.m.
Briefing on Source Term (Public Meeting)
2:00 p.m.
Briefing by IDCOR on Evaluation of Nuclear Power Plant Accident Risk (Public Meeting)

Thursday, April 4

10:00 a.m.
Discussion of Management-Organization and Internal Personnel Matters (Closed—Ex. 2 & 6) (if needed)
2:00 p.m.
Briefing on Design Basis Threat Statement (Closed—Ex. 1) (tentative)
3:30 p.m.
Affirmation Meeting (Public Meeting) (if needed)

ADDITIONAL INFORMATION: Affirmation of "Licensee Hearing Request in Civil Penalty Case" and "Final Amendments to 10 CFR Part 2, Subpart H, 'Exceptions to Notice and Comment Rulemaking' " (Public Meeting) were held on March 7.

TO VERIFY THE STATUS OF MEETINGS CALL (RECORDING): (202) 634–1498.

CONTACT PERSON FOR MORE INFORMATION: Julia Corrado (202) 634–1410.

Dated: March 7, 1985.

Andrew L. Bates,

Office of the Secretary.

[FR Doc. 85–6013 Filed 3–8–85; 4:35 pm]

BILLING CODE 7590–01–M

5

POSTAL SERVICE

Vote to Close Meeting

At its meetings on March 4, 1985, the Board of Governors of the United States Postal Service unanimously voted to close to public observation its meeting scheduled for April 1, 1985, in Hartford, Connecticut. The meeting will involve a discussion of personnel matters.

The meeting is expected to be attended by the following persons: Governors Babcock, Camp, Griesemer, Mckean, Peters, Ryan, Sullivan and Voss; Postmaster General Carlin; Deputy Postmaster General Strange; Secretary to the Board Harris; General Counsel Cox; Senior Assistant Postmaster General Coughlin; and Counsel to the Governors Califano.

The Board of Governors has determined that, pursuant to section 552b(c)(6) of Title 5, United States Code, and § 7.3(f) of Title 39, Code of Federal Regulations, the discussion of personnel matters is exempt from the open meeting requirement of the Government in the Sunshine Act (5 U.S.C. 552b(b)), because it is likely to disclosed information of a personal nature where disclosure would constitute a clearly unwarranted invasion of personal privacy. The Board also determined that the public interest does not require that the Board's discussion of this matter be open to the public.

In accordance with section 552b(f)(1) of Title 5, United States Code, and § 7.6(a) of Title 39, Code of Federal Regulations, the General Counsel of the United Sates Postal Service has certified that in his opinion the meeting to be closed may properly be closed to public observation, pursuant to sections 552b(c)(6) of Title 5 United States Code, and § 7.3 of Title 39, Code of Federal Regulations.

David F. Harris,

Secretary.

[FR Doc. 85–6112 Filed 3–11–85; 2:59 pm]

BILLING CODE 7710–12–M

federal register

Wednesday
March 13, 1985

Part II

Department of Transportation

Federal Aviation Administration

14 CFR Parts 1, 43, 45, 61, 91, 133, and 135

Rotorcraft Regulatory Review Program
Notice No. 5; Proposed Rule

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Parts 1, 43, 45, 61, 91, 133, and 135

[Docket No. 24550; Notice No. 85-8]

Rotorcraft Regulatory Review Program Notice No. 5

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This is Notice No. 5 of a series of notices to be issued as part of the FAA's comprehensive Rotorcraft Regulatory Review Program. This notice contains proposals which would amend and update the operations and maintenance requirements pertaining to rotorcraft and would establish a new Class D rotorcraft-load combination. This notice is based on a number of proposals discussed at the Rotorcraft Regulatory Review Conference held December 10–14, 1979, in New Orleans, LA, and the Rotorcraft Regulatory Review Meeting held August 18–20, 1980, in Washington, D.C. These proposals offer regulatory alternatives which could result in changes to present operations and maintenance regulations that the public and the FAA believe are necessary.

DATE: Comments must be received on or before July 10, 1985.

ADDRESS: Comments on this proposal may be mailed in duplicate to: Federal Aviation Administration, Office of the Chief Counsel, Attn: Rules Docket (AGC-204), Docket No. 24550; 800 Independence Avenue, SW., Washington, D.C. 20591, or delivered in duplicate to: Room 916, 800 Independence Avenue, SW., Washington, D.C. 20591. Comments delivered must be marked: Docket No. 24550.

Comments may be inspected at Room 916 between 8:30 a.m. and 5:00 p.m.

Comments regarding proposed reporting or recordkeeping requirements should be submitted to the Office of Information and Regulatory Affairs, Attn: Desk Officer for the Federal Aviation Administration, Office of Management and Budget, Washington, D.C. 20503. Please send a copy of your comments to the FAA Rules Docket.

FOR FURTHER INFORMATION CONTACT: Roger Baker, Operations Branch (AFO-820), General Aviation and Commercial Division, Federal Aviation Administration, 800 Independence Avenue, SW, Washington, D.C. 20591; Telephone (202) 426-8194.

SUPPLEMENTARY INFORMATION:

Comments Invited

Interested persons are invited to participate in the making of the proposed rules by submitting such written data, views, or arguments as they may desire. Comments relating to the environmental, energy, or economic impact that might result from adopting the proposals contained in this notice are invited. Communications should identify the regulatory docket or notice number and be submitted in duplicate to the address above. All communications received on or before the closing date for comments specified above will be considered by the Administrator before taking action on the proposed rule. The proposals contained in this notice may be changed in light of the comments received. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report summarizing each substantive public contact with FAA personnel concerned with this rulemaking will be filed in the docket. Commenters wishing to have the FAA acknowledge receipt of their comments submitted in response to this notice must submit with those comments a self-addressed, stamped postcard on which the following statement is made: "Comments on Docket No. 24550." The postcard will be dated, time stamped, and returned to the commenter.

For convenience, each proposal in this notice is numbered separately. The FAA requests that interested persons, when submitting comments, refer to proposals by these numbers and by the section to which they relate.

Availability of This Notice

Any person may obtain a copy of this notice of proposed rulemaking (NPRM) by submitting a request to the Federal Aviation Administrator, Office of Public Affairs, Attention: Public Information Center, APA-430, 800 Independence Avenue SW., Washington, D.C. 20591, or by calling (202) 426-8058. Communications must identify the notice number of this NPRM. Persons interested in being placed on a mailing list for future NPRM's should request a copy of Advisory Circular No. 11-2, Notice of Proposed Rulemaking Distribution System, which describes the application procedures.

Background

On January 5, 1979, the FAA gave notice of its Rotorcraft Regulatory Review Program and invited all interested persons to submit proposals for consideration during its forthcoming Rotorcraft Regulatory Review Conference (Notice 79-1; 43 FR 23925). The FAA received 613 proposals in response to Notice 79-1, of which 569 were placed on the conference agenda. The remaining 44 proposals were excluded because they fell outside the scope of the review program or for other reasons outlined in Notice 79-1.

In Notice 79-1A, published March 2, 1979, the FAA extended the period for submitting proposals relating to Notice 79-1 to May 31, 1979. This action was in response to a Helicopter Association of America (HAA) letter dated February 12, 1979, which stated that they did not have sufficient manpower to translate the grassroots comments into constructive proposals and justifications within the time alloted. This action was further supported by a letter from the United Kingdom Civil Aviation Authority (CAA) dated February 14, 1979, which stated that staffing limitations prevented anything more than a broad survey of the proposals.

In light of these comments, the FAA concluded that it was in the public interest to encourage a thorough review of the regulations and that good cause existed for extending the date for submitting proposals.

On October 22, 1979, the FAA announced the Rotorcraft Regulatory Review Conference and stated that conference agenda and compilation of proposals were available (Notice 79-1B; 43 FR 60747). Over 155 persons attended the conference which convened in New Orleans, Louisiana, on December 10, 1979. A transcript of those discussions is contained in Docket 18689.

On March 24, 1980, the FAA received a letter from the Helicopter Association of America (which changed its name to the Helicopter Association International) and the Aerospace Industries Association of America, Inc., requesting a meeting to present material to the FAA in an effort to assure themselves that the industry logic was understood by the Rotorcraft Review Team. The FAA gave careful consideration to the request and determined it would be in the best interest of all concerned to provide the requested meeting. The FAA also felt that all interested persons should be afforded the same opportunity to listen to and comment on the industry logic. Accordingly, Notice 79-1D (44 FR 43202; June 26, 1980) announced a Rotorcraft Review Meeting which was held August 18–20, 1980, in Washington, D.C. A copy of the transcript is in Docket 18689.

The FAA plans for the Rotorcraft Regulatory Review Program include publishing five notices of proposed rulemaking. The first notice included proposals dealing with the applicability sections of Parts 27 and 29 of the Federal Aviation Regulations (FAR), plus IFR certification and icing criteria. These were subsequently adopted as a final rule effective March 2, 1983 (48 FR 4374; January 31, 1983. The second notice covered flight and systems proposals. The third notice will cover powerplant proposals. The fourth notice will cover the airframe proposals. This fifth notice covers operations and maintenance proposals. Conference proposals relating to § 121.13 and Part 127 will be addressed in a separate notice.

The Proposals

This notice is part of the ongoing regulatory review program of the FAA to upgrade operations and maintenance standards for rotorcraft consistent with the advancing state-of-the-art. It deals with the operations and maintenance rules in Parts 43, 45, 61, 91, 133, and 135 and a related definition in Part 1 that is applicable to rotorcraft. The proposals are meant to strengthen or clarify existing rules. In addition, Appendix A contains conference proposals which the FAA, after careful deliberation, proposes to withdraw for the reasons stated.

Regulatory Evaluation and Regulatory Flexibility Determination

The FAA conducted an evaluation of the economic impact of these regulatory changes. A copy of the evaluation has been placed in the docket and is summarized here.

A large number of the proposed regulatory changes contained in Notice No. 5 was determined to have a negligible or no economic impact. Many of the proposals are either editorial or clarifying in nature. Table 1 lists these changes along with the assessment of their economic impacts as based on current industry practice, agency experience, and the explanations given under each rule change in the preamble for this notice.

TABLE 1.—PROPOSALS HAVING NEGLIGIBLE OR NO ECONOMIC IMPACT

Section	Economic impact
Part 1: 1.1	No impact—definition.
Part 43:	
43.3	Impact considered with Part 43, Appendix A.
43.15	Negligible costs.
Part 45: 45.14	Do.
Part 61:	
61.55	No impact—clarification.
61.57	Negligible cost.
61.87	Do.
61.105	Do.
61.107	Do.
61.113	Do.
61.125	Do.
61.127	No impact.
61.131	Negligible costs.
61.159	No impact.
61.161	Negligible savings.
61.163	Negligible costs.
61.165	No impact.
Appendix A	No impact—clarification.
Appendix B	Negligible costs.
Part 91:	
91.2	No impact.
91.116	Negligible savings.
91.171	Negligible costs.
Part 133:	
133.1	Negligible savings.
133.11	No impact—clarification.
133.13	Do.
133.23	Negligible savings.
133.25	No impact—clarification (see § 133.51).
133.27	No impact—clarification (see § 133.25).
133.31	No impact—clarification.
133.33	Do.
133.35	Negligible savings.
133.37	No impact—optional standard (see § 133.1).
133.39	No impact.
133.45	Negligible savings.
133.47	No impact—clarification (see § 133.45).
Part 135:	
135.1	Negligible savings.
135.23	No impact—clarification.
135.39	Negligible savings.
135.23	No impact—clarification.
135.117	Do.
135.167	Negligible costs.
135.181	Negligible savings.
135.223	Do.
135.227	No impact—clarification.

The FAA, however, invites specific public comments concerning the economic impact of the following two proposed rule changes summarized in Table 1.

1. *Section 45.14 Identification of Critical Components.*

The current rule affects all aircraft parts for which a replacement time, inspection interval, or related procedure is specified. To carry out the intent of the regulation requires that the usage and history of the specific parts be traceable. The proposed change simply clarifies the intent of the existing regulation and requires only that the identification markings be permanent and legible through the normal service life of a part under normal conditions.

Since the current industry markings on most critical aircraft components remain readable and reasonable methods are available that would ensure identification of the part through its normal service life, only negligible costs should result from this proposal. However, the FAA invites comments on this assumption and specific comments in regard to how many and which kinds of critical components are not now permanently and legibly indentified. Also, how many and which kinds of such critical components could not be permanently and legibly marked by a reasonable method that would ensure identification? What would be the expected identification? What would be the expected costs to ensure such identification?

2. *Section 135.167 Emergency Equipment: Extended Overwater Operations.*

The current rule affects both rotorcraft and fixed-wing operations under Part 135. By requiring rafts and life preservers with survivor locator lights, the proposed change reduces location and survivor water retrieval times. It provides a higher level of safety for the flying public and provides for the development of survival kits that are appropriate for the routes flown. Negligible industry costs would result from this proposal.

Queries to industry indicate that over 80 percent of the Part 135 airplane and rotorcraft operators actively conducting extended overwater operations already have life preservers and life rafts that are equipped with survivor locator lights. The remainer have rafts and preservers but may not be equipped with locator lights. For these operators, lights would be relatively inexpensive to acquire. All operators are equipped with survival kits and the change in kit regulations should have no impact except for new entrants into extended overwater operations. These new entrants may gain small savings if the survival kit appropriate for the route flown was less costly than the detailed kit required under the current rule. The FAA invites specific comments concerning the cost savings, other benefits, or unknown costs that could result from this proposed rule change.

The remainder of this summary discusses the benefits and costs of the eight proposed operations and maintenance changes that were determined to have the impacts shown in Table 2. The costs and savings data are derived from estimates obtained by industry research on representative operator groups which comprise the rotorcraft industry. The principal costs to the helicopter operators occur only because the operating exemptions given to them under the present rule will not be renewed if the proposed rule changes are adopted. Some small benefit gains and losses to service consumers or service providers, due to the proposed rule changes, could not be quantified. These savings and costs are primarily

the value of time delay to the consumers and increased service opportunities for the operators, and they are qualitatively discussed in the regulatory evaluation in the docket in the sections on the specific rule changes. The FAA does not have the data to determine their true value and public comment is invited on their assessment and also on any other industry impact of the eight proposed rule changes which are summarized in Table 2.

TABLE 2.—COST AND SAVING OF NOTICE NO. 5 PROPOSALS HAVING AN ECONOMIC IMPACT

Proposal	Industry cost (savings)	Principal reason(s)
Part 43, Appendix a: Major alterations major repairs, and preventive maintenance.	($413,000 recurring annual cost decrease) ($23,000 annual profit increase)	Reduce expense to transport and use mechanics in remote areas; reduced rotorcraft downtime.
Section 91.23 Fuel requirements for IFR flight	($485,000 recurring annual cost decrease)	Reduced operational cost from carrying less fuel.
Section 133.21 Personnel	($481,000 recurring annual cost decrease) ($481,000 recurring annual cost decrease)	Reduced cost from not having to transport chief pilot to field locations.
Section 133.41 Flight characteristics requirements	($340,000 recurring annual cost decrease) ($2,000 annual profit increase)	Reduced number of operational flight checks.
Section 133.51 Airworthiness certification	($104,000 annual cost decrease) ($9,000 annual profit increase)	Reduced paperwork and administrative costs.
Section 135.159 Equipment Requirements	$610,000 one time cost increase $63,000 recurring annual cost $3,000 one time lost profit $16,000 annual lost profit	Purchase and installation of Attitude and Heading Indicators for rotorcraft now operated under Exemption 2695B. Maintenance cost for instruments; one time loss for down time associated with installation; annual loss for some operators stopping night flight instead of purchasing instruments.
Section 135.173 Airborne thunderstorm detection equipment requirements.	$137,000 one time cost increase $14,000 recurring annual cost See footnote [1]	Purchase, installation and maintenance of minimum thunderstorm detection (TDX). It is equipment meeting intent and requirement of rule change for rotorcraft now operating under Exemption 2695B. See footnote [1]
Section 135.429 Required inspection personnel	$105,000 one time cost. See footnote [2] ($252,000 recurring annual cost decrease) or ($235,000 net annualized cost decrease—10 Years, 10% capital recovery).	Relieved work requiremetns for work done at remote areas or sites. One time cost for some operators to install more extensive system of maintenance. See Footnot.[2]

[1] This estimate can vary from no cost to industry estimate shown. The decision to install TDX equipment or to cease flying depends on the prevailing thunderstorm weather occurrence in the area of normal operations and the flexibility an operator has to delay revenue flights until weather improves and to reschedule them into other time periods.

[2] The one time cost accrues to a limited number of operators currently utilizing Exemption 2695B which permits maintenance under § 135.411(a)(1) instead of § 135.411(a)(2). If only the exemption itself were removed, industry may have recurring cost increases. However, the proposed change provides the primary benefit of the exemption to § 135.411(a)(2) and almost all of the expected recurring costs for them would not be incurred. Industry is invited to comment regarding the combined impact of the exemption and the proposed change to § 135.429.

1. Part 43, Appendix A: Major Alterations, Major Repairs, and Preventive Maintenance

Benefits. Annual recurring cost savings of $413,000 will accrue to the industry from not having to transport mechanics to remote areas to perform the preventive maintenance items proposed in this rule change. In addition, reducing downtime could produce an industry annual profit increase of about $23,000.

Regulatory Flexibility Determination. Industry research indicates that the fleet size distribution of Part 135 operators is skewed toward small fleets, with over ⅔ of these operators falling in the four-or-fewer-rotorcraft category. The maximum average economic impact per small operator is low enough ($1,217), relative to the threshold of economic significance, that it appears unlikely that ⅓ or more of the potentially affected small operators would be impacted to an extent greater than the threshold.

2. Section 91.23 Fuel Requirements for IFR Flight

Benefits. This proposal could provide an annual recurring cost savings of $485,000 to the industry through either increased payload capability for operations at or near gross weight or decreased operating costs when operating at lower weights.

Regulatory Flexibility Determination. An estimated 393 Part 91 operators are potentially affected by this proposal. All such operators that are aviation service providers may be considered "small." (Data needed to estimate the size distribution of non-aviation businesses operating proprietary helicopters is not available.) Benefits to operators may be assumed to be roughly proportional to fleet size. Therefore, to the extent that small operators have smaller fleets than large ones, the total of $485,000 in expected annual cost savings amounts to a maximum average of $1,234 per potentially affected small operator.

Industry research indicates that the fleet size distribution of operators subject to Part 91 (and not to Part 135 as well) has an even more pronounced orientation toward small fleets than that of Part 135 operators. Over ¾ of Part 91 operators have only one rotorcraft. The maximum average economic impact per operator is low enough, relative to the threshold of economic significance, that it appears unlikely that ⅓ or more of the potentially affected operators would be impacted to an extent greater than the threshold.

3. Section 133.21 Pilots

Benefits. This proposal would allow an operator to designate qualified pilots as assistant chief pilots to perform the functions of the chief pilot in areas where the chief pilot is not readily available. Operators who operate in diverse areas could achieve cost reductions and an annual recurring cost savings of $481,000 could accrue to the industry if this proposal were implemented.

Regulatory Flexibility Determination. The objective of these proposals is to eliminate external-load accidents due to inadequate pilot competence in performing particular operations. Two methods of attempting to ensure such pilot competence (which can be combined) are to require experience, such as through a "trainee" pilot working a certain amount of time with a "qualified" pilot and through pilot testing by a qualified examiner. Pilot testing might be carried out by FAA employees, designated examiners, or individuals within the particular company performing the external-load operation. Present regulations provide for such testing by a single Chief Pilot. This proposal would allow the Chief Pilot's duties to be delegated to Assistant Chief Pilots to relieve some of the compliance cost burden.

An estimated 179 external-load operators are potentially affected by this proposal. Almost all may be assumed to be small. Benefits may be considered roughly proportional to fleet size, although variations may be expected due to operating territory and other factors. Therefore, to the extent that small operators have smaller fleets than large ones, the $481,000 projected annual cost savings may be expected to average no more than $2,687 per affected operator.

Industry research indicates that over 40 percent of Part 133 certificate holders also hold Part 135 certificates. The total fleet size distribution of Part 133

operators is unknown. Regardless of whether it resembles the distribution of Part 135 or non-Part 135 operators, the relatively high maximum average impact suggests that the threshold of economic impact significance could very well be exceeded by ⅓ of the potentially affected small operators.

4. Section 133.41 Flight Characteristics Requirements

Benefits. This proposal would allow external-load operators to use operational flight checks demonstrated previously to show that rotorcraft-load combinations are satisfactory. By reducing the number of operational flight checks performed by the certificate holder, an annual recurring cost savings of $340,000 and an annual profit increase of $2,000 could accrue to the industry if this proposal were implemented.

Regulatory Flexibility Determination. The objective of these proposals is to reduce accidents resulting from the use of particular combinations of rotorcraft models with certain external loads and external-load attaching devices. Many such combinations of rotorcraft models, external loads, and external-load attaching devices pose a significant risk of accident even when under the control of a competent pilot. The FAA concludes that such confidence can only be maintained when each possible rotorcraft-load combination is successfully demonstrated at least once.

An estimated 164 external-load rotorcraft certificate holders are potentially affected by this proposal. Almost all may be considered small. Benefits may be considered roughly proportional to fleet size, although variations may be expected due to fleet diversity and other factors. Therefore, to the extent that small operators have smaller fleets than large ones, the $340,000 projected annual cost savings and $2,000 annual profit increase may be expected to be no greater than $2,085 per potentially-affected small operator, on average.

As stated previously, industry research indicates that somewhat over 40 percent of Part 133 certificate holders also hold Part 135 certificates. The size of the average impact, however, suggests that the threshold of economic impact significance could well be exceeded by ⅓ of the potentially affected small operators. Section 133.41 is closer to the borderline in this regard than § 133.21.

5. Section 133.51 Airworthiness Certification

Benefits. This proposal, along with the clarification of § 133.25, Amendment of Certificate, allows an external-load operator to add or delete a rotorcraft from its fleet by submitting a revised list to the FAA for approval. Eliminating unnecessary paperwork, time delays, and other administrative costs could achieve an annual recurring cost savings of $104,000 and an annual profit increase of $9,000 to the industry if this proposal were implemented.

Regulatory Flexibility Determination. An estimated 177 operators subject to Part 133 are potentially affected by this proposal. Almost all such operators may be considered small. Therefore, to the extent that small operators have smaller fleets than large ones, the total of $109,000 expected annual cost savings and $9,000 potential profit improvement may be expected to amount to no more than $667 per potentially affected small operator, on the average. Given this average impact, it would be mathematically impossible for ⅓ of the potentially affected small operators to be impacted to an extent greater than the threshold.

6. Section 135.159 Equipment Requirements

Benefits. There is no justification to show that operations conducted at night in helicopters require less instrumentation than airplanes to acquire the level of safety for passengers that is expected of air carriers. The average annual safety benefit accruing to society would range from $194,000 to $741,000 if relatively few (1 to 4) accidents per year under poor light conditions could be avoided. The minimum safety benefit expected over a 10-year period is $1,200,000 and the maximum is $4,600,000.

Costs. Compliance to the proposed rule change does involve a cost to those operators who use the exemption to conduct VFR night operations without the instruments required by the present regulation. An initial industry cost of $610,000 could be incurred by the operators of the affected aircraft to purchase and install the required instruments as well as recurring annual maintenance of $83,000 and a one-time lost profit of $3,000 for downtime to allow for installation. The annual lost profit associated with the possibility that some operators would cease night flying instead of purchasing and installing instruments is estimated to be $16,000.

Regulatory Flexibility Determination. An estimated 286 small rotorcraft operators conduct night operations and would be affected by removing the exemption allowing night flights without the required instruments. Sixty-nine of them use the exemption and are significantly affected. Since they do not comprise a substantial number of the affected small entities (less than one-third), an IRFA is not required for the removal of the exemption.

7. Section 135.173 Airborne Thunderstorm Detection Equipment Requirements

Benefits. This proposed rule change will maintain a level of safety comparable to those airplanes in Part 135 service that are equiped with thunderstorm detection equipment. The average annual safety benefit accruing to society would be $96,000 if less than one accident per year could be avoided by installing equipment. The maximum safety benefit over a 10-year period is $590,000.

Costs. Even though the proposed rule change relieves most rotorcraft operators of the burden of compliance with the current rule, some who now operate under exemption could be affected because they could not delay flight under night VFR during forecasted hazardous weather conditions. The average one-time costs for this industry group could be $137,000 to purchase and install the required equipment, with annual maintenance costs of $14,000.

Regulatory Flexibility Determination. Forty-one small operators utilize rotocraft with 10 passenger seats or more and would be affected by removing the exemption. Six of them use the exemption and are significantly affected. Since they do not comprise a substantial number of the affected small entities (less than one-third), an IRFA is not required.

8. Section 135.429 Required Inspection Personnel

Benefits. The proposed rule change will reduce operator costs of rotorcraft operators who do not now use the exemption to the requirements of § 135.411(a)(2). An annual cost savings of $252,000 would be achieved by the industry should the proposal be adopted.

Costs. Removing the exemption to operate under the requirements of § 135.411(a)(1) instead of § 135.411(a)(2) could cause incurrence of one-time industry costs of $105,000 for a limited number of affected operators to install a more extensive system of maintenance for 10-plus passenger rotorcraft. However, corresponding proposed changes to § 135.429 would retain most of the annual savings benefit that these operators achieved under the exemption and a net savings would accrue to the industry. Industry is invited to comment regarding the combined impact of the

exemption and the proposed rule change.

Regulatory Flexibility Determination. Forty-one small operators utilize rotorcraft with 10 passenger seats or more and would be affected by removal of the exemption. It is estimated that only six use the exemption to § 135.411(a)(2). If all six were significantly affected, they still would not comprise a substantial number (less than one-third) of the affected small entities and an IRFA is not required.

The costs of these proposed rule changes were compared to accident data that were the most closely associated with the specific rule change. Based on the accident data available, the costs were studied with respect to an average number of accidents that could have been avoided if the rule changes were adopted. It was concluded in the analysis that the costs to industry for these rule changes are at a level that is low enough to justify the cost with relatively few accidents prevented. Table 3 shows the low and high ranges for the benefit-to-cost ratios obtained for these changes.

TABLE 3.—BENEFIT-TO-COST RATIOS FOR PROPOSED RULES HAVING SIGNIFICANT COSTS

Proposed change to	Benefit to cost ratios	
	Low	High
Section 135.159	1.1	4.2
Section 135.173	0.0	2.6

The proposed changes to Part 43, Appendix A, and §§ 91.23, 133.21, 133.41, 133.51, 135.159, 135.173, and 135.429 refer to different, but partially overlapping, categories of operators.

(1) Part 43, Appx. A—Part 135 operators serving remote areas.

(2) § 91.23—Part 91 operators (not holding Part 135 certificates) flying to some extent under IFR.

(3) § 133.21—Part 133 operators in general.

(4) § 133.41—Part 133 operators in general.

(5) § 133.51—Part 133 operators in general.

(6) § 135.159—Part 135 operators flying to some extent VFR at night.

(7) § 135.173—Part 135 operators using rotorcraft with 10 seats or more.

(8) § 135.429—Part 135 operators using rotorcraft with 10 seats or more.

Although the first and second categories are, by definition, separate from each other, there exists no operator survey data that would allow the determination or reliable estimation of the actual extent to which each of the other categories overlap. It is possible to estimate, however, whether or not it is likely, given the (separate) distributions of fleet size for Part 135 and non-Part 135 operators, that the number of operators experiencing a significant cumulative net economic impact (positive or negative) from all eight of these proposals would constitute ⅓ or more of the total of individual potentially affected operators, if operator impact were proportional to operator fleet size. To provide the highest possible chance that this number will constitute ⅓ or more, the total of individual operators potentially affected by any of the proposals may be estimated as follows:

Part 135 operators, including all in proposal categories (1), (6), (7), and (8), and 42 percent of those in categories (3), (4), and (5). NOTE.—It is estimated that 42.4 percent of Part 133 operators also hold Part 135 certificates.	358
Non-Part 135 certificate holders, including 57.6 percent of those in proposal categories (3), (4), and (5)	393
Total	751

This estimate maximizes the extent of "overlapping" among relevant categories and increases the chance of ⅓ or more of the total individual operators' experiencing a significant cumulative net impact. It may be noted that such overlapping is not necessarily the most likely representation of actual practice. For example, Part 91 operators that fly under IFR may well not also engage in Part 133 operations, which are generally carried out under VFR.

Even with maximum overlapping of potentially affected small operator categories and given the relatively large number of non-Part 135, and even Part 135, operators that have single-craft or very small fleets, an estimated 217 out of 751 would be expected to bear a significant cumulative impact from the eight proposals. The remaining 534 would not be significantly impacted. The number of small operators expected to be impacted would be less than ⅓ of the total of such operators unless at least 120 of those operators were eliminated by being designated "large" operators. Therefore, it is reasonable to expect that the cumulative net economic impact (positive or negative) of these proposals would not reach significant levels for ⅓ or more potentially affected small operators.

However, the unknown number of proposal category (2) operators that might be eliminated as "large" entities and that might have been expected to be insignificantly impacted could reach as high as 270. Also, those proposal category (2) operators not eliminated might have atypically large fleets and could be significantly affected by proposal (2) alone. Therefore, the possibility exists that the total number of potentially affected small operators could be low enough so that over ⅓ of them would experience a significant cumulative net impact.

Impact on International Trade

The FAA cannot discern what impact, if any, this proposed regulation would have on international trade and invites public comments.

Reporting and Recordkeeping Requirements

Any reporting or recordkeeping requirements contained in these proposed rules have been submitted to the Office of Management and Budget for review under section 3504(h) of the Paperwork Reduction Act of 1980. Comments concerning these requirements are invited and should be submitted to the Office of Information and Regulatory Affairs, Attention: Desk Officer for the Federal Aviation Administration, Office of Management and Budget, Washington, D.C. 20503. Please send a copy of your comments to the FAA Rules Docket.

Conclusion

These proposals would upgrade rotorcraft certification and operational requirements and allow operators to utilize rotorcraft more fully. Therefore, the FAA has determined that these proposals, if adopted, are not major under Executive Order 12291 or significant under Department of Transportation Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). Based on the Regulatory Flexibility Determinations discussed in this document, I certify that these proposals will not have a significant economic impact on a substantial number of small entities. A draft regulatory evaluation is contained in the docket. A copy may be obtained by contacting the person identified under "FOR FURTHER INFORMATION CONTACT."

List of Subjects

14 CFR Part 1

Air safety, Safety, Aviation safety, Air Transportation, Air Carriers, Aircraft, Rotorcraft, Helicopters.

14 CFR Part 43

Air carriers, Air transportation, Aircraft, Aviation safety, Safety.

14 CFR Part 45

Air safety, Safety, Aviation safety, Air transportation, Transportation, Helicopters, Rotorcraft.

14 CFR Part 61

Airmen, Aircraft pilots, Pilots, Transportation, Air safety, Safety, Aviation safety, Air transportation, Aircraft, Helicopters, Rotorcraft.

14 CFR Part 91

Air carriers, Aviation safety, Safety, Aircraft, Aircraft pilots, Pilots, Air Transportation, Cargo.

14 CFR Part 133

Aircraft, Airworthiness, Pilots.

14 CFR Part 135

Air carriers, Aviation safety, Safety, Air transportation, Air taxi, Airworthiness, Cargo, Pilots, Airmen, Aircraft, Transportation, Helicopters.

The Proposed Amendments

The FAA proposes to amend 14 CFR Parts 1, 43, 45, 61, 91, 133, and 135, as follows:

PART 1—DEFINITIONS AND ABBREVIATIONS

1. By amending § 1.1 by revising the introductory paragraph of the definition of "Rotocraft-load combination" and by adding a new paragraph (4) to read as follows:

§ 1.1 General definitions.

* * * * *

"Rotorcraft-load combination" means the combination of a rotorcraft and an external load, including the external load attaching means. Rotorcraft-load combinations are designated as Class A, Class B, Class C, and Class D, as follows:

* * * * *

(4) "Class D rotorcraft-load combination" means one in which the external load is other than a Class A, B, or C and has been specifically approved by the Administrator for that operation.

* * * * *

Explanation: This proposal would amend the existing definitions in Part 1 and add the definition of Clas D rotorcraft-load combination.

This proposal will allow more flexibility to those operators certificated under the provisions of Part 133 who wish to conduct certain approved external-load operations that do not meet the current definition of an external load. For example, externally lifting and transporting a harbor pilot to or from a tanker ship could be an approved Class D rotorcraft-load operation under this proposal.

Ref: Proposals 4, 506, 507, 526, 527, 532, and 534; Committee III.

PART 43—MAINTENANCE, PREVENTIVE MAINTENANCE, REBUILDING, AND ALTERATION

2. By amending § 43.3 by redesignating paragraph (h) as paragraph (i) and by adding a new paragraph (h) to read as follows:

§ 43.3 Persons authorized to perform maintenance, preventive maintenance, rebuilding, and alterations.

* * * * *

(h) Notwithstanding the provisions of paragraph (g) of this section, the Administrator may approve a certificate holder under Part 135, operating rotorcraft in a remote area, to allow a pilot to perform specific preventive maintenance items provided—

(1) The items of preventive maintenance are a result of a known or suspected mechanical difficulty or malfunction that occurred en route to or in a remote area;

(2) The pilot has satisfactorily completed an approved training program and is authorized in writing by the certificate holder for each item of preventive maintenance that the pilot is authorized to perform;

(3) There is no certificated mechanic available to perform preventive maintenance;

(4) The certificate holder has procedures to evaluate the accomplishment of a preventive maintenance item that requires a decision concerning the airworthiness of the rotorcraft; and

(5) The items of preventive maintenance authorized by this section are those listed in paragraph C of Appendix A of this part.

* * * * *

Explanation: Proposed § 43.3(h) would allow an appropriately trained and authorized pilot of a Part 135 certificate holder that operates rotorcraft in remote sites to perform preventive maintenance as defined in Part 1 of this chapter and as listed in Appendix A to Part 43.

The FAA has granted numerous exemptions to offshore rotorcraft operators to allow a pilot to remove, check, and reinstall magnetic chip detectors in rotorcraft engines for the past 7 years. These exemptions were issued on the basis that certain rotorcraft operations related to energy development and production require rotorcraft to fly over remote areas. Engines that are equipped with a chip detector warning system may require a pilot to land in a remote area where a mechanic would not be available. The experience gained over the past 7 years under the authority of these exemptions substantiates that a properly qualified and trained pilot in communication with a maintenance facility can properly perform this type of preventive maintenance. This proposal is not intended to allow a pilot to perform preventive maintenance on a routine basis, nor is it intended to allow a pilot to perform inspections or maintenance that is a part of a certificate holder's required inspection or maintenance program. The pilot would be allowed to perform only preventive maintenance which resulted from an "unforeseen maintenance difficulty" and would not be authorized by Part 43 to perform a repair that may be needed in a remote area.

Ref: Proposal 424; Committee III.

3. By amending § 43.15 by revising the introductory text of paragraph (c)(2) and by adding a new paragraph (c)(3) to read as follows:

§ 43.15 Additional performance rules for inspections.

* * * * *

(c) * * *

(2) Each person approving a reciprocating-engine-powered aircraft for return to service after an annual or 100-hour inspection shall, before that approval, run the aircraft engine or engines to determine satisfactory performance in accordance with the manufacturer's recommendations of—

* * * * *

(3) Each person approving a turbine-engine-powered aircraft for return to service after an annual or 100-hour inspection shall, before that approval, run the aircraft engine or engines to determine satisfactory performance in accordance with the manufacturer's recommendations.

* * * * *

Explanation: The proposed change would require that turbine and reciprocating engines be operated to determine satisfactory performance in accordance with the manufacturer's specifications before returning an aircraft to service after an annual or 100-hour inspection. The present § 43.15 specifies run-up requirements that imply that only reciprocating engines need to be operated to determine satisfactory performance, thereby imposing no engine run-up requirement for turbine engines. The requirement is intended to provide the opportunity to discover any potential malfunction or defect such as deterioration of power and abnormal EGT (ITT) before returning an aircraft to service after an annual or 100-hour inspection.

This proposal merely formalizes the current industry practice and would

impose an additonal requirement only on those operators who currently do not follow the common industry practice.

Ref: Proposal 429; Committee III.

4. By amending Part 43, Appendix A, by revising paragraph (c)(23) and by adding new paragraph (c)(29) to read as follows:

Appendix A—Major Alterations, Major Repairs, and Preventive Maintenance

* * * * *

(c) * * *

(23) Cleaning or replacing fuel and oil strainers or filter elements.

* * * * *

(29) Removing, checking, and replacing magnetic chip detectors.

* * * * *

Explanation: This proposal would amend Appendix A by adding routine checks or replacement of fuel and oil strainers and filters and magnetic chip detectors under the category of preventive maintenance.

Replacing fuel and oil strainers and filters is proposed as a preventive maintenance item because the present rule only provides for the cleaning of fuel and oil filters. The majority of aircraft in use today incorporate throw-away filters in the fuel and oil systems. This proposal would add the provision in Appendix A regarding replacement or cleaning of fuel and oil filters which has been needed since throw-away filters were introduced and installed in aircraft.

The proposal to include checking and replacing chip detector plugs as items of preventive maintenance is nothing more than formal recognition of current industry practice which currently requires an exemption. Experience by operators in accomplishing this procedure has revealted no compromise in safety while easing the maintenance burden for operations in remote areas.

Ref: Proposals 431 and 432; Committee III.

PART 45—IDENTIFICATION AND REGISTRATION MARKING

5. By revising § 45.14 to read as follows:

§ 45.14 Identification of critical components.

Each person who produces a part for which a replacement time, inspection interval, or related procedure is specified in the Airworthiness Limitations section of a manufacturer's maintenance manual or Instructions for Continued Airworthiness shall permanently and legibly mark that component with a part number (or equivalent) and a serial number (or equivalent).

Explanation: This proposal would require a person who provides a part for which a replacement time or inspection interval is specified in an Airworthiness Limitations Section of a manufacturer's maintenance manual or Instructions for Continued Airworthiness to mark the part with a serial number and part number that will not become unreadable during normal service wear. There have been some parts marked in such a manner that identification has become impossible after short periods of normal service. One commenter expresses concern that it may be impossible to place an identification plate on many items. This proposal requires that parts be marked by a reasonable method to ensure identification during its normal service life. It does not specifically require an identification tag.

Parts listed in the Airworthiness Limitations Section of a manufacturer's maintenance manual or Instructions for Continued Airworthiness are those for which a specific life limit or overhaul time is specified. Often life limit or overhaul time is specified because of a fatigue limit, and operating the aircraft beyond the specified time could result in an unsafe condition. This proposal is safety related and is intended to ensure that all such parts are properly identified and that the identification is readable through the normal service life of the part.

Ref: Proposal 433; Committee III.

PART 61—CERTIFICATION: PILOTS AND FLIGHT INSTRUCTORS

§ 61.21 [Amended]

5(A). By amending § 61.21 by removing the word "airplane" and inserting the word "aircraft" in its place each time it appears in the section (three replacements).

Explanation: This proposal would specify the duration of Category II pilot authorizations for helicopter operators. This proposal is necessary in conjunction with the proposed change to § 91.2, which would allow helicopter operators to conduct Category II instrument approaches.

6. By amending § 61.55 by revising the section heading, the introductory text of (a), introductory text of (b), (b)(1), (b)(2)(i) and (ii), and (d)(1) through (d)(3) to read as follows:

§ 61.55 Second-in-command qualifications.

(a) Except as provided in paragraph (d) of this section, no person may serve as second in command of an aircraft type certificated for more than one required flight crewmember unless that person holds—

* * * * *

(b) Except as provided in paragraph (d) of this section, no person may serve as second in command of an aircraft type certificated for more than one required flight crewmember unless, since the beginning of the 12th calendar month before the month in which the pilot serves, the pilot has, with respect to that type of aircraft,—

(1) Become familiar with all information concerning the aircraft's powerplant, major components and systems, major appliances, performance and limitations, standard and emergency operating procedures, and the contents of the approved aircraft flight manual or approved flight manual material, placards, and markings.

(2) * * *

(i) Three takeoffs and three landings to a full stop in an aircraft as the sole manipulator of the flight controls; and

(ii) Engine-out procedures and maneuvering with an engine out while executing the duties of a pilot in command. This requirement may be satisfied in an aircraft simulator acceptable to the Administrator.

* * * * *

(d) * * *

(1) Meets the pilot-in-command proficiency check requirements of Part 121, 125, 127, or 135 of this chapter;

(2) Is designated as the second in command of an aircraft operated under the provisions of Part 121, 125, 127, or 135 of this chapter; or

(3) Is designated as the second in command of an aircraft for the purpose of receiving flight training required by this section and no passengers or cargo are carried on that aircraft.

* * * * *

Explanation: This proposal would extend the second-in-command pilot qualifications to include helicopters that are type certificated for more than one required flight crewmember. The current rule provides only for second-in-command pilot qualifications for operations of large airplanes or turbojet-powered multiengine airplanes type certificated for more than one pilot.

The operating complexities of helicopters that are type certificated for more than one pilot are comparable to large airplanes or turbojet-powered multiengine airplanes and the requirement for an additional pilot crewmember is mandatory and is included in the operating limitations of the flight manual.

This proposal would align helicopter second-in-command qualification and

currency requirements with the requirements currently applicable to large airplanes or turbojet-powered multiengine airplanes type certificated for more than one required flight crewmember. It would also exclude pilots operating under Part 127 from meeting the qualifications and proficiency check requirements of § 61.55.

The rapid increase in the number of helicopter type certificated for more than one required flight crewmember indicates the need to update the current rule to provide second-in-command pilot qualification and proficiency check requirements. Safety would be increased through specific training and flight testing of pilots before they serve as second in command on helicopters type certificated for more than one required flight crewmember.

Ref: Proposal 438; Committee III.

7. By amending § 61.57 by adding the word "calendar" before the word "months" in the flush paragraph following (a)(2) and in paragraphs (e)(1) and (e)(2) and by revising introductory text of paragraph (a) to read as follows:

§ 61.57 Recent flight experience: Pilot in command.

(a) *Flight review.* No person may act as pilot in command of an aircraft unless, within the preceding 24 calendar months, that person has—

* * * * *

Explanation: This proposal would delete the expired applicability date of November 1, 1974, from § 61.57(a) since this date has no further significance to the flight review requirement. Further, to remain consistent with other regulatory provisions, the word "calendar" would be inserted before the word "months" wherever it appears in this section. This would cause all compliance dates for recency of experience to become due at the end of the month.

§ 61.67 [Amended]

7(A). By amending § 61.67 by removing the word "airplane" and inserting the word "aircraft" in its place each time it appears in the section as follows:

§ 61.67(a)(2) three replacements
§ 61.67(c)(1)(ii) one replacement
§ 61.67(c)(2)(ii) one replacement
§ 61.67(d)(2) five replacements

Explanation: This proposal would specify the Category II pilot authorization requirements for helicopter operators. These provisions are the same as for airplane operators. The proposal is necessary in light of the proposed change to § 91.2, which would allow helicopter operators to conduct Category II instrument approaches.

8. By amending § 61.87 by redesignating paragraphs (c)(2)(v), (vi), and (vii) as paragraphs (c)(2)(vi), (vii), and (viii), respectively; by revising the paragraph heading of (c)(2), by revising (c)(2)(ii); by adding a new paragraph (c)(2)(v); and by revising redesignated paragraph (c)(2)(viii) and paragraph (c)(3) to read as follows:

§ 61.87 Requirements for solo flight.

* * * * *

(c) * * *

(1) * * *

(2) *In rotorcraft other than single-place gyroplanes.*

(i) * * *

(ii) Ground maneuvering and runups;

* * * * *

(v) Rapid decelerations (helicopters only);

* * * * *

(viii) Simulated emergency procedures, including autorotational descents with a power recovery or running landing in gyroplanes, a power recovery to a hover in single-engine helicopters, or approaches to a hover or landing with one engine inoperative in multiengine helicopters.

* * * * *

(3) *In single-place gyroplanes.*

(i) Flight preparation procedures, including preflight inspection and powerplant operation;

(ii) Ground maneuvering and runups;

(iii) Straight and level flight, turns, climbs, and descents;

(iv) Navigation by ground references, airport traffic patterns, and collision avoidance procedures;

(v) Normal takeoffs and landings;

(vi) Simulated emergency procedures, including autorotational descents with a power recovery or a running landing; and

(vii) At least three successful flights in a gyroplane under the observation of a qualified instructor.

Items in paragraphs (c)(3) (iii) and (iv) of this section may be accomplished in a dual-control helicopter or gyroplane. Instruction must be given by a flight instructor who is authorized to give instruction in helicopters or gyroplanes, as appropriate.

* * * * *

Explanation: This proposal would add ground maneuvering to the training requirements in § 61.87 for rotorcraft, including single-place gyroplanes, would add rapid deceleration maneuver for helicopters, and would expand simulated emergency procedures for rotorcraft, including autorotational descents appropriate to the type and class of rotorcraft. It further would amend the title of paragraph (c)(2) to clarify that this paragraph does not apply to single-place gyroplanes. It also would require instruction in single-place gyroplanes to be given by a flight instructor who is authorized to give instruction in helicopters or gyroplanes, as appropriate.

The current rule does not require training in ground maneuvering for rotorcraft, although this training is required before solo flight in airplanes. It is equally important for a student pilot to be able to safely ground maneuver a rotorcraft. Training in rapid decelerations is not required for helicopters in the current rule. This is a basic training maneuver involving coordinating all helicopter flight controls, which has a direct relationship to coordinating the flight controls for performing autorotational descents in actual or simulated emergencies. This training maneuver is needed to develop more comprehensive knowledge and skill in the pre-solo phase. Expanding procedures for performing autorotational descents is necessary to provide adequate training in the type and class of aircraft involved. Since the successful outcome of an actual or simulated emergency involving an autorotational descent depends upon the pilot's reaction, knowledge, and skill, a change to the current rule is needed to require specific training appropriate to the type and class of rotorcraft.

The current rule for pre-solo training in single-place gyroplanes does not require training in ground maneuvering and flight maneuvers in free flight. It appears that the student pilot does not receive adequate preparation and training before solo flight, nor is the public provided adequate protection. This additional training would involve some negligible increase in cost, but the safety benefits should justify the cost increase.

If the current rule is changed to reflect the additional training proposed for single-place gyroplanes, a change in flight instructor authorization would also be necessary. Since the proposed training would involve inflight training, the flight instructor would be required to be appropriately rated in the class of rotorcraft used for the training. The student pilot would have the option of receiving the inflight training in either a helicopter or a gyroplane that has more than one pilot seat, while the performance of ground procedures would be required in a single-place gyroplane.

The phrase "towed from the ground" would be removed to recognize other methods of achieving flight. This editorial change will have no effect on the current practices utilized by instructors in tow operations.

In summary, these additional training requirements are needed to provide for more preparation before solo flight and to improve flight proficiency during the pre-solo training phase.

Ref: Proposals 442, 443, and 444; Committee III.

9. By amending § 61.105 by revising paragraph (a); by removing paragraph (b); by redesignating paragraphs (c), (d), and (e) as (b), (c), and (d), respectively, to read as follows:

§ 61.105 Aeronautical knowledge.

* * * * *

(a) *Airplanes and rotorcraft.* (1) The accident reporting requirements of the National Transportation Safety Board and the Federal Aviation Regulations applicable to private pilot privileges, limitations, and flight operations for airplanes or rotorcraft, as appropriate, the use of the "Airman's Information Manual," and FAA advisory circulars;

(2) VFR navigation using pilotage, dead reckoning, and radio aids;

(3) The recognition of critical weather situations from the ground and in flight, the procurement and use of aeronautical weather reports and forecasts;

(4) The safe and efficient operation of airplanes or rotorcraft, as appropriate, including high-density airport operations, collision avoidance precautions, and radio communication procedures; and

(5) Basic aerodynamics and the principles of flight which apply to airplanes or rotorcraft, as appropriate.

* * * * *

Explanation: This proposal would delete the rotorcraft aeronautical knowledge requirements in § 61.105(b) and consolidate those requirements with the current airplane aeronautical knowledge requirements in § 61.105(a). It would retitle § 61.105(a) "Airplanes and rotorcraft" and would require instruction in basic airplane or rotorcraft aerodynamics and principles of flight, as appropriate. This would effectively require rotorcraft applicants to receive instruction in the use of the "Airman's Information Manual" and FAA advisory circulars.

Since the aeronautical knowledge requirements in the current rule are almost identical for airplanes and rotorcraft, including those requirements in one section would consolidate and simplify the rule. While rotorcraft and airplanes are significantly different in flight characteristics, there are many elements of basic aeronautical knowledge which would apply equally to both categories of aircraft. The current rule for rotorcraft does not require instruction in the use of the Airman's Information Manual and FAA advisory circulars, even though information contained in these publications applies to the operation of both airplanes and rotorcraft. Instruction in basic aerodynamics and principles of flight is not included in the current rule for airplanes or rotorcraft. Since there are questions on these subjects in the private and commercial pilot written tests, a specific instructional requirement is needed to prepare the applicant for the written test and the practical demonstration in the aircraft. Knowledge of these subjects is essential to the safe operation of airplanes and rotorcraft. This proposal is not intended to change the knowledge requirements for airplanes but to update the rotorcraft knowledge requirements and to consolidate them into the airplane section for clarity and brevity.

Ref: Proposals 445 and 446; Committee III.

10. By amending § 61.107 by revising paragraphs (b)(4), (5) and (6) and by adding new paragraph (b)(7) to read as follows:

§ 61.107 Flight proficiency.

* * * * *

(b) * * *

(4) Cross-country flying, using pilotage, dead reckoning, and radio aids, including one 1-hour flight;

(5) Operations in confined areas and on pinnacles, rapid decelerations, landings on slopes, high-altitude takeoffs, and run-on landings;

(6) Night flying, including takeoffs, landings, and VFR navigation; and

(7) Simulated emergency procedures, including aircraft and equipment malfunctions, approaches to a hover or landing with an engine inoperative in a multiengine helicopter, or autorotational descents with a power recovery to a hover in single-engine helicopters.

* * * * *

Explanation: This proposal would incorporate additional flight training maneuvers to the flight proficiency requirements of § 61.107(b). It would provide for flight instruction to be given in confined area and pinnacle operations, slope landings, and night flying to include takeoffs, landings, and VFR navigation. It also would clarify the cross-country requirement and expand emergency procedures in the current rule to include aircraft and equipment malfunctions, autorotational descents with power recovery to a hover in single-engine helicopters, and approach and landing procedures with one engine inoperative in multiengine helicopters.

Flight training in certain basic maneuvers is needed for the private pilot as well as the commercial pilot. The current rule does not require training in confined area and pinnacle operations or slope landings and does not differentiate between single-engine and multiengine helicopters for performing autorotational descents. Also, it does not require training in night flying including takeoffs, landings, and VFR navigation. Since the private pilot may well be performing these maneuvers and procedures, it is necessary that this training be provided to improve flight proficiency for the safe and efficient operation of present-day, single-engine and multiengine rotorcraft.

Ref: Proposal 447; Committee III.

11. By revising § 61.113 to read as follows:

§ 61.113 Rotorcraft rating: Aeronautical experience.

An applicant for a private pilot certificate with a rotorcraft category rating must have at least the following aeronautical experience:

(a) *For a helicopter class rating,* 40 hours of flight instruction and solo flight time in aircraft, including at least—

(1) 20 hours of flight instruction from an authorized flight instructor, 15 hours of which must be in a helicopter, including—

(i) 3 hours of cross-country flying in helicopters;

(ii) 3 hours of night flying in helicopters, including 10 takeoffs and landings, each of which must be separated by an en route phase of flight;

(iii) 3 hours in helicopters in preparation for the private pilot flight test within 60 days before that test; and

(iv) A flight in a helicopter with a landing at a point other than an airport; and

(2) 20 hours of solo flight time, 15 hours of which must be in a helicopter, including at least—

(i) 3 hours of cross-country flying in helicopters, including one flight with a landing at three or more points, each of which must be more than 25 nautical miles from each of the other two points; and

(ii) Three takeoffs and landings in helicopters at an airport with an operating control tower, each of which must be separated by an en route phase of flight.

(b) *For a gyroplane class rating,* 40 hours of flight instruction and solo flight time in aircraft, including at least—

(1) 20 hours of flight instruction from an authorized flight instructor, 15 hours of which must be in a gyroplane, including—

(i) 3 hours of cross-country flying in gyroplanes;

(ii) 3 hours of night flying in gyroplanes, including 10 takeoffs and landings; and

(iii) 3 hours in gyroplanes in preparation for the private pilot flight test within 60 days before that test; and

(2) 20 hours of solo flight time, 10 hours of which must be in a gyroplane, including—

(i) 3 hours of cross-country flying in gyroplanes, including one flight with a landing at three or more points, each of which must be more than 25 nautical miles from each of the other two points; and

(ii) Three takeoffs and landings in gyroplanes at an airport with an operating control tower.

(c) An applicant who does not meet the night flying requirement in paragraph (a)(1)(ii) or paragraph (b)(1)(ii) of this section is issued a private pilot certificate bearing the limitation "night flying prohibited." This limitation may be removed if the holder of the certificate demonstrates compliance with the requirements of paragraph (a)(1)(ii) or paragraph (b)(1)(ii) of this section, as appropriate.

Explanation: This proposal would specify aeronautical experience requirements for a private pilot applicant seeking a rotorcraft category and class rating. It would not increase the total hours presently required for a rotorcraft category and class rating.

Current § 61.113 requires an applicant for a rotorcraft category and helicopter class rating to have at least a total of 40 hours of flight instruction and solo flight time in aircraft, with at least 15 hours of solo flight in helicopters or at least 10 hours of solo flight in gyroplanes, as appropriate to the rating sought.

This proposal adds a requirement for 15 hours of flight instruction in rotorcraft in the class for which application has been made. The current rule does not specify a requirement in the category and class of helicopter or gyroplane. However, this minimal instructional requirement is reasonable and is in keeping with current industry practices to ensure an acceptable level of safety. No additional cost would be incurred since most applicants for these ratings exceed the proposed flight time minimums at the time of certification.

The proposed aeronautical experience requirements were discussed at the conference and it was the consensus that these specific experience requirements are needed to adequately train and prepare a private pilot experience requirements are needed to adequately train and prepare a private pilot applicant for a class rating in present-day rotorcraft. Accordingly, this proposal would provide a higher level of aeronautical experience and thereby increase levels of safety. The cost factor is considered negligible.

Ref: Proposals 448, 449, and 450; Committee III.

12. By amending § 61.125(b) by removing the word "and" in paragraph (b)(3); by removing the period at the end of paragraph (b)(4) and inserting "; and" in its place; and by adding a new paragraph (b)(5) to read as follows:

§ 61.125 Aeronautical knowledge.

* * * * *

(b) * * *

(5) Basic aerodynamics and principles of flight which apply to rotorcraft and the significance and use of performance charts.

* * * * *

Explanation: This change would provide for additional instruction in basic aerodynamics and principals of flight for rotorcraft and in the use of the rotorcraft's performance charts. The use of these charts will assist the pilot in better planning and the safer operation of the rotorcraft by using the parameters established by the manufacturer for optimum performance.

Ref: Proposals 445, 446, and 451; Committee III.

13. By amending § 61.127 by removing the word "and" at the end of paragraph (b)(7); by revising paragraphs (b) (5) and (8); and by adding a new paragraph (b)(9) to read as follows:

§ 61.127 Flight proficiency.

* * * * *

(b) * * *

* * * * *

(5) Rapid descent with power (settling with power) and recovery;

* * * * *

(8) Operations in confined areas and on pinnacles, rapid decelerations, landing on slopes, high-altitude takeoffs, and run-on landings; and

(9) Simulated emergency procedures, including failure of an engine or other component or system, and approaches to a hover or landing with one engine inoperative in multiengine helicopters, or autorotational descents with a power recovery to a hover in single-engine helicopters.

* * * * *

Explanation: This proposal would revise the flight proficiency requirements in § 61.127 for a commercial pilot applicant by adding the words "(settling with power)" to § 61.127(b)(5) to clarify the term "rapid descent with power." It also would revise § 61.127(b)(8) by including only those maneuvers that are considered to be non-emergency-related and would add a new emergency procedures paragraphs to include emergency-type maneuvers and procedures that would be appropriate to present-day, single-engine and multiengine helicopters.

It was the consensus at the conference that specific maneuvers listed in current § 61.127(b)(8) are not considered to be emergency-related and should be listed as normal maneuvers. These maneuvers include high-altitude takeoffs and run-on landings, rapid decelerations, confined area and pinnacle operations, and landing slopes. The proposed new emergency procedures paragraph contains meneuvers and procedures that paraliel emergency maneuvers and procedures for other aircraft of similar complexity.

Ref: Proposal 453; Committee III.

14. By revising § 61.131 to read as follows:

§ 61.131 Rotorcraft ratings: Aeronautical experience.

An applicant for a commercial pilot certificate with a rotorcraft category rating must have at least the following aeronautical experience as a pilot:

(a) *For a helicopter class rating,* 150 hours of flight time, including at least 100 hours in powered aircraft, 50 hours of which must be in a helicopter, including at least—

(1) 40 hours of flight instruction from an authorized flight instructor, 15 hours of which must be in a helicopter, including—

(i) 3 hours of cross-country flying in helicopters;

(ii) 3 hours of night flying in helicopters, including 10 takeoffs and landings, each of which must be separated by an en route phase of flight;

(iii) 3 hours in helicopters preparing for the commercial pilot flight test within 60 days before that test; and

(iv) Takeoffs and landings at three points other than airports; and

(2) 100 hours of pilot-in-command flight time, 35 hours of which must be in a helicopter, including at least —

(i) 10 hours of cross-country flying in helicopters, including one flight with a landing at three or more points, each of which must be more than 50 nautical miles from each of the other two points; and

(ii) Three takeoffs and landings in helicopters, each of which must be separated by an en route phase of flight.

at an airport with an operating control tower.

(b) *For a gyroplane class rating.* 150 hours of flight time in aircraft, including at least 100 hours in powered aircraft, 50 hours of which must be in a gyroplane, including at least—

(1) 40 hours of flight instruction from an authorized flight instructor, 15 hours of which must be in a gyroplane, including at least—

(i) 3 hours of cross-country flying in gyroplanes;

(ii) 3 hours of night flying in gyroplanes, including 10 takeoffs and landings; and

(iii) 3 hours in gyroplanes preparing for the commercial pilot flight test within 60 days before that test; and

(2) 100 hours of pilot-in-command flight time, 35 hours of which must be in a gyroplane, including at least—

(i) 10 hours of cross-country flying in gyroplanes, including one flight with a landing at three or more points, each of which is more than 50 nautical miles from each of the other two points; and

(ii) Three takeoffs and landings in gyroplanes at an airport with an operating control tower.

Explanation: This proposal would revise the aeronautical experience requirements in § 61.131 for commercial pilot applicants seeking rotorcraft class ratings. It would not increase the total flight hours presently required for any rating, but would change specific requirements to parallel the aeronautical experience standards of the International Civil Aviation Organization (ICAO) for a commercial pilot helicopter class rating.

This proposal also would change the current rule regarding gyroplane class ratings. The proposed changes would decrease the required 200 hours of pilot time to 150 hours. This is consistent with the current rule requiring 150 hours of pilot flight time for a helicopter class rating. It also would change the requirement for 75 hours of the flight time in gyroplanes to 35 hours of flight time as pilot in command. The cross-country flight time experience is introduced in this proposal to align these minimums with ICAO standards.

The current rule of 10 hours of pilot-in-command time for commercial rotorcraft applicants is outdated and the proposed 35 hours of pilot-in-command time is consistent with ICAO and clearly is reasonable for operations conducted by individuals accepting remuneration or reward. This proposal may be viewed as increasing the burden on individuals applying for this certificate. As the prominent leader in training helicopter pilots and as individuals holding U.S. airman certificates are utilized more and more around the world, the FAA is obligated to ensure the terms of the ICAO convention are met. Additionally, these proposed changes are in keeping with the current FAA policy of reducing the number of differences that are on file with ICAO in Annex I.

The additional cost associated with this proposal is considered negligible because of the overall reduction in the flight hour requirement for individuals seeking a commercial gyroplane rating.

Ref: Proposal 454; Committee III.

15. By revising § 61.159 to read as follows:

§ 61.159 Rotorcraft rating: Aeronautical knowledge.

An applicant for an airline transport pilot certificate with a rotorcraft category and a helicopter class rating must pass a written test on—

(a) So much of this chapter as relates to air carrier rotorcraft operations;

(b) Rotorcraft design, components, systems, and performance limitations;

(c) Basic principles of loading and weight distribution and their effect on rotorcraft flight characteristics;

(d) Air traffic control systems and procedures relating to rotorcraft;

(e) Procedures for operating rotorcraft in potentially hazardous meteorological conditions;

(f) Flight theory as applicable to rotorcraft; and

(g) The items listed under paragraphs (b) through (m) of § 61.153 of this chapter.

Explanation: This proposal reorganizes paragraphs (a)(1) through (a)(6) without substantive change. Additionally, this is one of a group of proposals that would delete the airline transport pilot (ATP) gyroplane and VFR helicopter class ratings from ATP certification. This proposal would delete the gyroplane and VFR helicopter class ratings in paragraph (a) and the reference to the VFR helicopter class rating in paragraph (b). The ATP VFR helicopter class rating has little value in helicopter operations due to the advanced state-of-the-art of IFR-equipped helicopters. Furthermore, there are no rotorcraft operations presently being conducted that require an ATP certificate with a VFR helicopter class rating or a gyroplane class rating and none are anticipated in the future.

Ref: Proposals 434, 456, 458, 459, 462, and 466; Committee III.

16. By revising § 61.161 to read as follows:

§ 61.161 Rotorcraft rating: Aeronautical experience.

(a) An applicant for an airline transport pilot certificate with a rotorcraft category and helicopter class rating must hold a commercial pilot certificate, or a foreign airline transport pilot or commercial pilot certificate with a rotorcraft category and helicopter class rating issued by a member of ICAO, or be a pilot in an armed force of the United States whose military experience qualifies him for the issuance of a commercial pilot certificate under § 61.73 of this chapter.

(b) An applicant must have had at least 1,200 hours of flight time as a pilot, including at least—

(1) 500 hours of cross-country flight time;

(2) 100 hours of night flight time, of which at least 15 hours are in helicopters;

(3) 200 hours in helicopters, including at least 75 hours as pilot in command performing as second in command performing the duties and functions of a pilot in command under the supervision of a pilot in command, or any combination thereof; and

(4) 75 hours of instrument time under actual or simulated instrument conditions of which at least 50 hours were completed in flight with at least 25 hours in helicopters as pilot in command, or as second in command, or the duties of a pilot in command under the supervision of a pilot in command, or any combination thereof.

Explanation: This proposal would allow pilots holding licenses issued by ICAO members and military pilots who are qualified for commercial pilot certificates to qualify as applicants for a rotorcraft Airline Transport Pilot (ATP) certificate. This is consistent with requirements currently established in § 61.155 for airplane ATP certification.

It was the consensus at the conference that the existing requirement for the 1,200 hours of flight time to be obtained within the preceeding 8-year period was much too restrictive for rotorcraft ATP certification, since there is no corresponding time limit placed on the flight time for airplane ATP applicants. It also was the consensus of the committee on pilot requirements that 5 hours of helicopter flight time within 60 days prior to the flight test serves no particular purpose for an individual possessing the experience of an airline transport pilot applicant. When an individual reaches these qualifications, he or she should be able to pass judgement on the skills associated with the ATP certificate. The FAA agrees with these comments and therefore proposes that these requirements be deleted.

In addition, this proposed regulation no longer includes the reference to "a

helicopter class rating limited to VFR." By eliminating the ATP helicopter class rating limited to VFR and requiring a showing of instrument competency for all ATP certification in rotorcraft, this proposal would upgrade rotorcraft ATP standards.

Ref: Proposals 459, 460, and 461; Committee III.

17. By revising § 61.163 to read as follows:

§ 61.163 Rotorcraft rating: Aeronautical skill.

(a) An applicant for an airline transport pilot certificate with a rotorcraft category and helicopter class rating, or additional aircraft rating, must pass a practical test on those maneuvers set forth in Appendix B of this Part in either a helicopter, an approved rotorcraft simulator or training device, or a combination of these devices and a helicopter. The FAA inspector or designated examiner may modify or waive any maneuver where necessary for the reasonable and safe operation of the rotorcraft being used and may combine any maneuvers and permit their performance in any convenient sequence to determine the applicant's competency.

(b) Whenever an applicant for an airline transport pilot certificate with a rotorcraft category and helicopter class rating does not already have an instrument rating, the applicant shall, as part of the practical test, comply with § 61.65(g).

Explanation: This proposal is one of a group of proposals dealing with rotorcraft airline transport pilot (ATP) certification requirements. It would remove the rotorcraft gyroplane and VFR helicopter class ratings from the ATP aeronautical skill requirements in § 61.163 and provide for the use of approved rotorcraft simulators and training devices in demonstrating competence. Additionally, the listing of maneuvers and procedures to be demonstrated for helicopter ATP certification would be revised and detailed in proposed new Appendix B.

The ATP gyroplane and VFR helicopter class ratings have no practical use in present-day rotorcraft operations. There are no rotorcraft operations being conducted that require ATP certification for gyroplanes or helicopters limited to VFR and none are anticipated in the future.

This proposal also provides for use of approved rotorcraft simulators or training devices in the applicant's demonstration of competence. The state-of-the-art of helicopter simulators and training devices has been developed to a degree that would allow selected maneuvers and procedures to be demonstrated in these approved devices instead of an actual aircraft.

The maneuvers and procedures contained in Appendix A were written specifically for airplanes and allow the use of simulators and training devices. Those maneuvers would not apply to helicopter ATP certification in all instances, and it would be inappropriate to incorporate helicopters in Appendix A in its present form. Therefore, the maneuvers and procedures to be demonstrated during the practical test for an ATP certificate with a rotorcraft category and helicopter class rating would be incorporated into a new Appendix B.

In addition, proposed § 61.163(b) would require an applicant for an ATP certificate who does not already hold an instrument rating to demonstrate additional instrument proficiency consistent with § 61.65(g). This change is compatible with the deletion of the VFR helicopter class rating.

Ref: Proposal 434, 456, 458, 463, 464, 466, and 471 through 480; Committee III.

18. By amending § 61.165 by removing paragraph (b); by redesignating paragraph (c) as (b); and by revising the introductory text of both paragraphs (a) and redesignated (b) to read as follows:

§ 61.165 Additional category ratings.

(a) *Rotorcraft category with a helicopter class rating.* The holder of an airline transport pilot certificate (airplane category) who applies for a rotorcraft category with a helicopter class rating must meet the applicable requirements of §§ 61.159, 61.161, and 61.163, and—

* * * * *

(b) *Airplane rating.* The holder of an airline transport pilot certificate (rotorcraft category) who applies for an airplane category must comply with §§ 61.153, 61.155 (except § 61.155(b)(1)), and 61.157, and—

* * * * *

Explanation: This proposal would delete the VFR helicopter and gyroplane class ratings from the requirements for an additional ATP category rating in § 61.165. Rotorcraft airline transport pilot certificates with VFR helicopter or gyroplane class ratings have little application in current rotorcraft operations. This is one of several proposals that would delete those ratings from rotorcraft ATP certification requirements. See the explanation for the proposed change to § 61.159.

Ref: Proposals 434, 456, 458, 459, 462, and 466; Committee III.

19. By amending Part 61 by revising the title of Appendix A to read as follows:

Appendix A—Practical Test Requirements for Airplane Airline Transport Pilot Certificates and Associated Class and Type Ratings

* * * * *

Explanation: This proposal would amend the title of Part 61, Appendix A, to clarify that the practical test requirements pertain to applicants for airplane ATP certificates and associated class and type ratings. A new Appendix B is proposed to outline the practical test requirements for rotorcraft ATP certificates with a helicopter class rating and associated type ratings.

20. By amending Part 61 by adding a new Appendix B to read as follows:

Appendix B—Practical Test Requirements for Rotorcraft Airline Transport Pilot Certificates with a Helicopter Class Rating and Associated Type Ratings

Throughout the maneuvers prescribed in this appendix, good judgement commensurate with a high level of safety must be demonstrated. In determining whether such judgement has been shown, the FAA inspector or designated pilot examiner who conducts the check considers adherence to approved procedures, actions based on analysis of situations for which there is no prescribed procedure or recommended practice, and qualities of prudence and care in selecting a course of action. The successful outcome of a procedure or maneuver will never be in doubt.

Maneuvers/Procedures

The maneuvers and procedures in this appendix must be performed in a manner that satisfactorily demonstrates knowledge and skill with respect to—

(1) The helicopter, its systems, and components;

(2) Proper control of airspeed, direction, altitude, and attitude in accordance with procedures and limitations contained in the approved Rotorcraft Flight Manual, checklists, or other approved material appropriate to the rotorcraft type; and

(3) Compliance with approved en route, instrument approach, missed approach, ATC, and other applicable procedures.

I. Preflight

(a) *Equipment examination (oral).* The equipment examination must be repeated if the flight maneuvers portion is not satifactorily completed within 60 days. The equipment examination must cover—

(1) Subjects requiring a practical knowledge of the helicopter, its powerplants, systems, components, and operational and performance factors;

(2) Normal, abnormal, and emergency procedures and related operations and limitations; and

(3) The appropriate provisions of the approved helicopter Flight Manual or manual material.

(b) *Preflight inspection.* The pilot must—

(1) Conduct an actual visual inspection of the exterior and interior of the helicopter, locating each item and explaining briefly the purpose of inspecting it; and

(2) Demonstrate the use of the prestart checklist, appropriate control system checks, starting procedures, radio and electronic equipment checks, and the selection of proper navigation and communications radio facilities and frequencies before flight.

(c) *Taxiing.* This maneuver includes ground taxiing, hover taxiing (including performance checks), and docking procedures, as appropriate, in compliance with instructions issued by ATC, the FAA inspector, or the designated pilot examiner.

(d) *Powerplant checks.* As appropriate to the helicopter type in accordance with the operating limitations.

II. Takeoffs

(a) *Normal.* One normal takeoff from a stabilized hover which begins when the helicopter is taxied into position for takeoff.

(b) *Instrument.* One takeoff with instrument conditions simulated at or before reaching 100 feet above airport elevation.

(c) *Crosswind.* One crosswind takeoff from a stabilized hover, if practical under the existing meteorological, airport, and traffic conditions.

(d) *Powerplant failure.* (1) For single-engine rotorcraft, one normal takeoff with simulated powerplant failure.

(2) For multiengine rotorcraft, one normal takeoff with simulated failure of one engine—

(i) At an appropriate airspeed that would allow continued climb performance in forward flight; or

(ii) At an appropriate airspeed that is 50 percent of normal cruise speed, if there is no published single-engine climb airspeed for that type of helicopter.

(e) *Rejected.* One normal takeoff that is rejected after simulated engine failure at a reasonable airspeed, determined by giving due consideration to the helicopter's characteristics, length of landing area, surface conditions, wind direction and velocity, and any other pertinent factors that may adversely affect safety.

III. Instrument Procedures

(a) *Area departure and arrival.* During each of these maneuvers, the applicant must—

(1) Adhere to actual or simulated ATC clearances (including assigned bearings or radials); and

(2) Properly use available navigation facilities.

(b) *Holding.* This maneuver includes entering, maintaining, and leaving holding patterns.

(c) *ILS and other instrument approaches.* The instrument approach begins when the helicopter is over the initial approach fix for the approach procedure being used (or turned over to the final controller in case of a ground control approach) and ends when the helicopter terminates at a hover or touches down or where transition to a missed approach is completed. The following approaches must be performed:

(1) At least one normal ILS approach.

(2) For multiengine rotorcraft, at least one manually controlled ILS approach with a simulated failure of one powerplant. The simulated engine failure should occur before initiating the final approach course and continue to a hover or touchdown or through the missed approach procedure.

(3) At least one nonprecision approach procedure that is representative of the nonprecision approach procedure that the applicant is likely to use.

(4) At least one nonprecision approach procedure on a letdown aid other than the approach procedure performed under subparagraph (3) of this paragraph that the applicant is likely to use.

(d) *Circling approaches.* At least one circling approach must be made under the following conditions:

(1) The portion of the circling approach to the authorized minimum circling approach altitude must be made under simulated instrument conditions.

(2) The approach must be made to the authorized minimum circling approach altitude followed by a change in heading and the necessary maneuvering (by visual reference) to maintain a flight path that permits a normal landing on a runway at least 90° from the final approach course of the simulated instrument portion of the approach.

(3) The circling approach must be performed without excessive maneuvering and without exceeding the nomal operating limits of the rotorcraft. The angle of bank should not exceed 30°.

(e) *Missed approaches.* Each applicant must perform at least two missed approaches with at least one missed approach from an ILS approach. At the discretion of the FAA inspector or designated examiner, a simulated powerplant failure may be required during any of the missed approaches. These maneuvers may be performed either independently or in conjunction with maneuvers required under section III or V of this Appendix. At least one must be performed inflight.

IV. Inflight Maneuvers

(a) *Steep turns.* At least one steep turn in each direction must be performed. Each steep turn must involve a bank angle of 30° with a heading change of at least 180° but not more than 360°.

(b) *Settling with power.* One entry into and recovery from settling with power must be performed. For the purpose of this maneuver, the required settling with power condition is reached when the helicopter is descending vertically at a rate of descent of 300 feet per minute or greater and a sufficient amount of engine power is applied to induce a perceptible buffet or other response to the initial rotor blade stall. (This maneuver will be performed under VFR.)

(c) *Powerplant failure.* In addition to the specific requirements for maneuvers with simulated powerplant failures, the FAA inspector or designated examiner may require a simulated powerplant failure at any time during the check.

(d) *Recovery from unusual attitudes.*

V. Approaches and Landings

(a) *Normal.* One normal approach to a stabilized hover or to the ground must be performed.

(b) *Instrument.* One approach to a hover or to a landing in sequence from an ILS instrument approach.

(c) *Crosswind.* One crosswind approach to a hover or to the ground, if practical under the existing meteorological, airport, or traffic conditions.

(d) *Powerplant failure.* For a multiengine rotorcraft, maneuvering to a landing with simulated powerplant failure of one engine.

(e) *Rejected.* Rejected landing, including a normal missed approach procedure at approximately 50 feet above the runway. This maneuver may be combined with instrument or missed approach procedures but instrument conditions need not be simulated below 100 feet above the runway or landing area.

(f) *Autorotative landings.* Autorotative landings in a single-engine helicopter. The applicant may be required to accomplish at least one autorotative approach and landing from any phase of flight as specified by the FAA inspector or designated examiner.

VI. Normal and Abnormal Procedures

Each applicant must demonstrate the proper use of as many systems and devices listed below as the FAA inspector or designated examiner finds are necessary to determine that the applicant has a practical knowledge of the use of the systems and devices appropriate to the helicopter type:

(a) Anti-icing or deicing systems.

(b) Autopilot or other stability augmentation devices.

(c) Airborne radar devices.

(d) Hydraulic and electrical systems failures or malfunctions.

(e) Landing gear failures or malfunctions.

(f) Failure of navigation or communications equipment.

(g) Any other system appropriate to the helicopter as outlined in the approved Rotorcraft Flight Manual.

VII. Emergency Procedures

Each applicant must demonstrate the proper emergency procedures for as many of the emergency situations listed below as the FAA inspector or designated examiner finds are necessary to determine that the applicant has adequate knowledge of, and ability to perform, such procedures:

(a) Fire or smoke control in flight.

(b) Ditching.

(c) Evacuation.

(d) Operation of emergency equipment.

(e) Emergency descent.

(f) Any other emergency procedure outlined in the approved Rotorcraft Flight Manual.

Explanation. This proposal establishes a new Appendix B which details the maneuvers and procedures required for helicopter ATP certification.

Current § 61.163 contains maneuvers and procedures that are no longer applicable to instrument flight within our present-day navigation airspace and approach systems. Terms such as "beam

bracketing" and "cone (station) identification" are obsolete and it was agreed at the rotorcraft conference that these items should be deleted from the current rule. The proposed change is needed to update the current rule to require knowledge and skill in the maneuvers and procedures more appropriate to our present-day IFR environment. It takes into account the advances in technology and instrumentation of modern-day helicopters.

This proposed change satisfies the intent of proposals 471 through 480 to incorporate helicopter ATP certification in the airplane ATP certification requirements contained in Appendix A of Part 61.

See the explanation for the proposed changes to § 61.163.

Ref: Proposals 434, 456, 458, 463, 464, 466, and 471 through 480; Committee III.

PART 91—GENERAL OPERATING AND FLIGHT RULES

§ 91.2 [Amended]

21. By amending § 91.2 by adding the words "helicopters and" after the phrase "for the operation of" and changing the word "find" to "finds" after the phrase "Category II operations, if he".

Explanation: This proposal would afford helicopter operators the opportunity of applying for Category II instrument approach authorization. It would impose no additional cost but rather it would expand the sphere of possible operations of helicopters. Technological advances in helicopter design and performance have demonstrated that helicopters are at least as capable of safely conducting Category II instrument operations as are small airplanes. The change to the word "find" is a typographical correction and has no substantive effect.

Ref: Proposals 481 and 482; Committee III.

22. By revising § 91.23(a)(3) and (b)(2)(i) and (ii) to read as follows:

§ 91.23 Fuel requirements for flight in IFR conditions.

(a) * * *

(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, to fly after that for 30 minutes at normal cruising speed.

(b) * * *

(2) * * *

(i) The ceiling will be at least 1,000 feet above the airport elevation for helicopters or at least 2,000 feet above the airport elevation for other aircraft; and

(ii) Visibility will be at least 1 mile for helicopters or at least 3 miles for other aircraft.

Explanation: This proposal would reduce the IFR fuel requirements for helicopters from 45 minutes to 30 minutes. It also would lower the ceiling from 2,000 feet to 1,000 feet and lower the visibility minimum from 3 miles to 1 mile as criteria for determining if an alternate airport is needed.

This proposal highlights the differences between helicopters and airplanes in the IFR environment. While on the surface it would appear that IFR fuel reserves should be the same for airplanes and helicopters, the differences in aircraft become apparent in the capabilities and limitations of the two categories.

Current § 91.23 requires 45 minutes of reserve fuels for all aircraft operating in IFR conditions, and a ceiling and visibility requirement of 2,000 feet and 3 miles, among other requirements, for determining if an alternate airport is needed. The helicopter has the unique ability to reduce airspeed on approach to as low as 40 knots and is provided reduced visibility minimums in Part 97. The minimums in Part 97 for helicopters are, in some cases, the same as Category II minimums for airplanes. Alternate airport minimums are the same for both categories of aircraft.

The helicopter being dispatched must carry a larger percentage of its fuel capacity as reserve than the normal airplane. Because the helicopter, with its reduced minimums, has a better probability of completing the flight to the planned destination, it should be given this recognition by allowing for a reduced fuel reserve. Often helicopters are denied the ability to initiate flights simply because too much fuel is required to be carried for reserve.

The FAA has gained sufficient experience in SFAR 29 operations to conclude that reducing the required fuel reserve to 30 minutes for helicopters will not reduce the level of safety that has been maintained.

This proposal would allow operators greater flexibility and utilization of their helicopters in the IFR environment.

Ref: Proposals 483 and 484; Committee III.

23. By amending § 91.116 by revising the first clause in the introductory text of (f), revising (f)(1) and adding (f)(3) to read as follows:

§ 91.116 Takeoff and landing under IFR: General.

* * * * *

(f) *Civil airport takeoff minimums.* Unless otherwise authorized by the Administrator, no person operating an aircraft under Part 121, 125, 127, 129, or 135 of this chapter * * *

(1) For aircraft, other than helicopters, having two engines or less—1 statute mile visibility.

* * * * *

(3) For helicopters—½ statute mile visibility.

* * * * *

Explanation: This proposal would add a reference to Part 127 in § 91.116(f), and woud effectively include this part, along with Parts 121, 125, 129, and 135, under the takeoff minimum requirements authorized in this section. It also would establish civil airport takeoff minimums for helicopters.

Current § 91.116(f) includes takeoff minimum requirements for persons operating aircraft under Parts 121, 125, 129, or 135. Since Part 127 requires an operating certificate, it would be appropriate to include it in the current rule to provide consistency in the type of operators who are authorized takeoff minimums under this section.

The takeoff minimums specified in current § 91.116(f) apply to all aircraft. This proposal would also establish a separate takeoff minimum of ½-mile visibility for helicopters. The helicopter is highly maneuverable and is capable of sustaining flight at lower airspeeds. Because of its unique flight capabilities, it can safely maneuver in lower takeoff visibility conditions than the current rule allows.

It was the consensus at the rotorcraft review conference that helicopters should be authorized lower takeoff minimums from civil airports, consistent with the lower approach minimums allowed for helicopters in § 97.3(d)(1). One-half-mile visibility as a standard takeoff minimum for helicopters is appropriate when considering the maneuverability and flight capabilities of these aircraft. There are existing provisions, which are still applicable, to allow lower-than-standard takeoff minimums to air carriers when approved by the certificate-holding district office. Adopting this proposal would reduce helicopter operational delays with no adverse effect on safety and increase service to the traveling public.

Ref: Proposal 494; Committee III.

§ 91.171 [Amended]

24. By amending § 91.171 by inserting the words "or helicopter" after the word "airplane" each time it appears in paragraphs (a), (b)(1), (b)(2)(iv), and (d).

Explanation: This proposal would require that helicopters be subject to the altimeter system tests and inspections required in § 91.171. The proposal originally called for amending § 91.170;

however, that section was redesignated as § 91.171 and revised in Operations Review Program Amendment No. 12 (47 FR 41076; September 16, 1982).

Helicopter systems and equipment are as critical for IFR flight as are the systems and equipment in airplanes. Therefore, similar standards should apply for testing and inspecting those systems. It was the consensus at the rotorcraft conference that the proposed change be adopted. The cost, as detailed in the regulatory evaluation, is considered to be negligible.

Ref: Proposal 497; Committee III.

PART 133—ROTORCRAFT EXTERNAL-LOAD OPERATIONS

25. By revising § 133.1(b) and adding (c) and (d) to read as follows:

§ 133.1 Applicability.

* * * * *

(b) Operating and certification rules governing the conduct of rotorcraft external-load operations in the United States by any person.

(c) The certification rules of this part do not apply to—

(1) Rotorcraft manufacturers when developing external-load attaching means;

(2) Rotorcraft manufacturers demonstrating compliance of equipment utilized under this Part or appropriate portions of Part 27 or Part 29 of this Chapter;

(3) Operations conducted by a person demonstrating compliance for the issuance of a certificate or authorization under this part;

(4) Training flights conducted in preparation for the demonstration of compliance with this part;

(5) Operations conducted as an air carrier; or

(6) A Federal, State or local government conducting operations with public aircraft.

(d) For the purpose of this Part, a person other than a crewmember or a person who is essential and directly connected with the external-load operation may be carried only in approved Class D rotorcraft-load combinations.

Explanation: This proposal would delete the "nonpassenger-carrying" provision from § 133.1(b), exclude certain operations from the certification requirements of Part 133, and establish a new class of rotorcraft external-load operations.

These changes would establish a Class D rotorcraft-load combination and allow persons lifted as a Class D load to be carried as passengers during those operations. The current rule prohibits persons from being carried, except those who perform an essential function in connection with the external-load operation. Hoisting of persons into and out of helicopters has become a common practice in other nations of the world, and many present-day helicopters have the performance capabilities that provide an adequate level of safety for these operations.

A special committee was formed at the rotorcraft conference to discuss the proposed changes to Part 133 and the committee made the following recommendations:

1. Class D loads should be authorized for hoisting persons into and out of rotorcraft.
2. No passengers would be carried, except as part of a Class D load combination.
3. Multiengine Category A rotorcraft should be used for Class D load operations.
4. The rotocraft should have no lateral movement relative to the pickup point.
5. The hoisting device should be approved and made "man safe," but jettisonable. (Communication capability between crewmembers was assumed.)
6. The rotorcraft would be certificated under Part 27, Part 29, or their predecessor parts.
7. An initial and recurrent training program should be required for Class D load operations.

Deleting the "nonpassenger-carrying" provision is in keeping with related proposals which would allow persons (other than crewmembers or persons who are essential and directly connected with the external-load operation) to be carried is approved Class D rotorcraft-load combinations.

The "operations conducted as an air carrier" provision excepts air carriers from the requirement to hold a Rotorcraft External-Load Operator Certificate. The intent is to allow these operators to conduct more than one kind of operation under their air carrier certificates, in accordance with approved operations specifications.

The current rule requires persons who conduct civil rotorcraft external-load operations to obtain a certificate. Several rotorcraft manufacturers have requested relief from this requirement when conducting external-load operations for developing external-load attaching equipment and demonstrating certification compliance of that equipment. This proposed change would provide regulatory and economic relief to rotorcraft manufacturers by eliminating the manpower and resources required to obtain and keep current a Rotorcraft External-Load Operator Certificate. However, this relief would not allow manufacturers to operate with an external-load combination for the purpose of sales demonstrations or customer acceptance flights. A current Rotorcraft External-load Operator Certificate would be required by the manufacturer for these operations.

Relief has also been incorporated into the proposed rule by excluding the requirement for certifiction as a preface to demonstrating compliance with Part 133 for the issuance of a certificate or authorization. The exclusions also include the training necessary to accomplish this demonstration.

Ref: Proposals 4, 506, 507, 526, 527, 532, and 534; Committee III.

26. By revising § 133.11(b) to read as follows:

§ 133.11 Certificate required.

* * * * *

(b) No person holding a Rotorcraft External-Load Operator Certificate may conduct rotorcraft external-load operations subject to this part under a business name that is not on that certificate.

Explanation: This proposal would remove current § 133.11(b) and recodify existing § 133.21(a) to a more appropriate subpart.

As currently written, § 133.11(b) allows a person who did not hold a Rotorcraft External-Load Operator Certificate to conduct certain external-load operations until December 9, 1977. Since this date has expired, § 133.11(b) is not longer applicable and should be deleted from the current rule.

Paragraph (b), as proposed, is recodified from current § 133.21(a) without change since its location is more appropriate in Subpart B.

Ref: Proposal 508; Committee III.

§ 133.13 [Amended]

27. By amending § 133.13 by placing a period after the word "renewed" and by removing the phrase ", except that a certificate issued before June 25, 1977 expires on August 10, 1979."

Explanation: This proposal would remove obsolete dates. Since certificates issued before June 25, 1977, have expired, this editorial change imposes no burden on any operator.

28. By amending the title of § 133.21; by revising paragraph (b); and by adding new paragraph (c) to read as follows:

§ 133.21 Personnel.

* * * * *

(b) The applicant must designate one pilot, who may be the applicant, as chief pilot for rotorcraft external-load operations. The applicant also may

designate qualified pilots as assistant chief pilots to perform the functions of the chief pilot when the chief pilot is not readily available. The chief pilot and assistant chief pilots must be acceptable to the Administrator and each must hold a current Commercial or Airline Transport Pilot Certificate, with a rating appropriate for the rotorcraft prescribed in § 133.19.

(c) The holder of a Rotorcraft External-Load Operator Certificate shall report any change in designation of chief pilot or assistant chief pilots immediately to the FAA certificate-holding office. The new chief pilot must be designated and must comply with § 133.23 within 30 days or the operator may not conduct further operations under the Rotorcraft External-Load Operator Certificate unless otherwise authorized by the FAA certificate-holding office.

Explanation: This proposal would provide for a rotorcraft external-load operator to designate qualified pilots as assistant chief pilots to perform the functions of the chief pilot in areas of operations where the chief pilot is not readily available. The assistant chief pilots would be authorized to conduct the knowledge and skill test requirements of § 133.23 (b) and (c) and perform other chief pilot duties as appropriate to a specific area of operation. The proposal also recodifies current § 133.31(c) as § 133.21(c) and would be amended to allow operators an additional 15 days to designate new chief pilots.

It is possible for an external-load operator simultaneously to conduct operations in remote or widely scattered areas. Since one of the chief pilot's functions is to conduct the knowledge and skill test requirements for pilots to be used by the operator, it is questionable if the chief pilot can carry out his or her duties and responsibilities at each base of operations without causing unnecessary delays. At the present time, the chief pilot, of necessity, has to be current in several different types of helicopters used by an operator to conduct the skill tests required for each class of rotorcraft-load authorized for an operator. A change to the current rule would reduce operational costs by allowing the use of assistant chief pilots, thereby obviating the need to transport the chief pilot to remote or widely scattered locations.

Proposed paragraph (c) recodifies current § 133.31(c) into Subpart B, which contains provision for designating chief pilots. Additionally, the requirement is amended to provide relief to operators by extending the 15-day requirement to 30 days for a rotorcraft external-load operator to designate a new chief pilot. The requirement in the current rule could cause a hardship in instances where a qualified chief pilot is not available for employment within the 15 days time frame. This proposal would allow external-load operators an additional 15 days to designate a new chief pilot without having to discontinue operations, and would result in less of an economic burden for the operators.

Ref: Proposals 511 and 519; Committee III.

29. By amending § 133.23 by adding a new paragraph (b)(5); by revising the introductory text of (c), by removing the introductory text of paragraph (c)(6); by removing "; and" in paragraph (c)(6)(i) and inserting a period in its place; by redesignating amended paragraph (c)(6)(i) and (c)(6)(ii) as (c)(6) and (c)(7), respectively to read as follows:

§ 133.23 Knowledge and skill.

* * * * *

(b) * * *

(5) Appropriate rotorcraft-load combination flight manual.

(c) The test of skill requires appropriate maneuvers for each class requested. The appropriate maneuvers for each load class must be demonstrated in the rotorcraft prescribed in § 133.19 of this part.

* * * * *

Explanation: This proposal would add the rotorcraft-load combination flight manual to the test of knowledge requirements in § 133.23(b) and delete the requirement in § 133.23(c) that the skill test be demonstrated at the rotorcraft's maximum certificated weight. Paragraph (c) would be reworked for clarity.

The rotorcraft-load combination flight manual is an FAA-approved document prepared by an external-load operator and contains information that is essential to safety while conducting external-load operations. Accordingly, it should be included in the knowledge test requirements.

Current § 133.23(c) requires the pilot's skill test to be demonstrated at the maximum certificated weight for external loads. Aircraft performance decreases proportionally as altitude and/or temperature increases. These factors have a limiting effect on the total weight a rotorcraft can lift, and it would not be possible under various atmospheric conditions or altitudes for the skill test to be demonstrated as maximum certificated weight. One commenter at the rotorcraft conference was opposed to a less-than-maximum certificated weight for the skill demonstrated, but several commenters supported the proposed change. The FAA agrees that the skill test can be demonstrated adequately at a less-than-maximum certificated weight. This change would relieve a regulatory burden in that enternal-load operators would not have to transport personnel, equipment, and rotorcraft to locations where the rotorcraft would be capable of performing at maximum certificated weight and is consistent with similar rules involving the demonstration of pilot skills. This could result in a substantial cost savings for external-load operators.

Ref. Proposals 512 and 513; Committee III.

30. By amending § 133.25 by designating the current undesignated text as paragraph (a); by removing from paragraph (a) the phrase "a rotorcraft or" after the words "amendment of the applicant's certificate, to add or delete"; by amending paragraph (a) by removing the phrase "§§ 133.19, 133.21, and 133.23," and inserting the phrase "§§ 133.19, 133.49," in its place; and by adding a new paragraph (b) to read as follows:

§ 133.25 Amendment of certificate.

* * * * *

(b) The holder of a rotorcraft external-load certificate may apply for an amendment to add or delete a rotorcraft authorization by submitting to the certificate-holding FAA district office a new list of rotorcraft, by registration number, with the classes of rotorcraft-load combinations for which authorization is requested.

Explanation: This proposal would provide a simplified procedure for a certificated external-load operator to add rotorcraft to, or delete them from, its certificate. The current rule requires the same certificate amendment procedure as for original certification and changing rotorcraft-load combination classes. This proposed change would allow an operator to amend its certificate by simply submitting a new list of specified rotorcraft with the classes of rotorcraft-load combinations for which authorization is requested to the certificate-holding FAA district office. This change will eliminate unnecessary paperwork and time delays, thereby resulting in cost savings for certificated external-load operators.

Ref. Proposals 510, 514, 515, 516, 517, and 520; Committee III.

31. By revising § 133.27(a) to read as follows:

§ 133.27 Availability, transfer, and surrender of certificate.

(a) Each holder of a rotorcraft external-load operator certificate shall keep that certificate and a list of authorized rotorcraft at the home base of operations and shall make it available for inspection by the Administrator upon request.

* * * * *

Explanation: This proposal would add to current § 133.27 a requirement that a rotorcraft external-load operator maintain at its home base of operations a list of authorized rotorcraft. A related proposal to change § 133.25 would establish a new and simplified procedure for rotorcraft external-load operators who desire to add or delete rotorcraft from their operating certificates. This proposed change is necessary to ensure a current list of authorized rotorcraft is maintained and to provide consistent requirements in §§ 133.25 and 133.27. The two sections taken together would add no new requirements and are relieving in nature. See the explanation for the proposed change to § 133.25.

Ref. Proposals 514, 515, and 516; Committee III.

32. By revising § 133.31 to read as follows:

§ 133.31 Emergency operations.

(a) In an emergency involving the safety of persons or property, the certificate holder may deviate from the rules of this part to the extent required to meet that emergency.

(b) Each person who, under the authority of this section, deviates from a rule of this part shall notify the Administrator within 10 days after the deviation. Upon the request of the Administrator, that person shall provide the certificate-holding FAA office a complete report of the aircraft operation involved, including a description of the deviation and reasons for it.

Explanation: This proposal would allow certificate holders to deviate from Part 133 during emergencies. Current Part 133 does not provide for a deviation to meet emergencies relating to aircraft, equipment, weather minimums, and safety of persons or property. This change would allow those deviations and would be consistent with similar authorizations in §§ 91.3 and 135.19.

Ref: Proposal 536; Committee III.

33. By redesignating 133.33 as 133.39 without change and by adding a new § 133.33 to read as follows:

§ 133.33 Operating rules.

(a) No person may conduct a rotorcraft external-load operation without, or contrary to, the Rotorcraft-Load Combination Flight Manual prescribed in § 133.47.

(b) No person may conduct a rotorcraft external-load operation unless—

(1) The rotorcraft complies with § 133.19; and

(2) The rotorcraft and rotorcraft-load combination are authorized under the Rotorcraft External-Load Operator Certificate.

(c) Before a person may operate a rotorcraft with an external-load configuration that differs substantially from any that person has previously carried with that type of rotorcraft (whether or not the rotorcraft-load combination is of the same class), that person must conduct, in a manner that will not endanger persons or property on the surface, such of the following flight-operational checks as the Administrator determines are appropriate to the rotorcraft-load combination:

(1) A determination that the weight of the rotorcraft-load combination and the location of its center of gravity are within approved limits, that the external load is securely fastened, and that the external load does not interfere with devices provided for its emergency release.

(2) Make an inital liftoff and verify that controllability is satisfactory.

(3) While hovering, verify that directional control is adequate.

(4) Accelerate into forward flight to verify that no attitude (whether of the rotorcraft or of the external load) is encountered in which the rotorcraft is uncontrollable or which is otherwise hazardous.

(5) In forward flight, check for hazardous oscillations of the external load, but if the external load is not visible to the pilot, other crewmembers or ground personnel may make this check and signal the pilot.

(6) Increase the forward airspeed and determine an operational airspeed at which no hazardous oscillation or hazardous aerodynamic turbulence is encountered.

(d) Notwithstanding the provisions of Part 91 of this chapter, the holder of a Rotorcraft External-Load Operator Certificate may conduct (in rotorcraft type certificated under and meeting the requirements of Part 27 or Part 29 of this chapter, including the external-load attaching means) rotorcraft external-load operations over congested areas if those operations are conducted without hazard to persons or property on the surface and comply with the following:

(1) The operator must develop a plan for each complete operation, coordinate this plan with the FAA district office having jurisdiction over the area in which the operation will be conducted, and obtain approval for the operation from that district office. The plan must include an agreement with the appropriate political subdivision that local officials will exclude unauthorized persons from the area in which the operation will be conducted, coordination with air traffic control, if necessary, and a detailed chart depicting the flight routes and altitudes.

(2) Each flight must be conducted at an altitude, and on a route, that will allow a jettisonable external load to be released, and the rotorcraft landed, in an emergency without hazard to persons or property on the surface.

(e) Notwithstanding the provisions of Part 91 of this chapter, and except as provided in § 133.45(d), the holder of a Rotorcraft External-Load Certificate may conduct external-load operations, including approaches, departures, and load positioning maneuvers necessary for the operation, below 500 feet above the surface and closer than 500 feet to persons, vessels, vehicles, and structures, if the operations are conducted without creating a hazard to persons or property on the surface.

(f) No person may conduct rotorcraft external-load operations in IFR conditions unless specifically approved by the Administrator. However, under no circumstances may a person may be carried as part of the external-load in IFR conditions.

Explanation: This proposal recodifies the provisions of current § 133.33 as § 133.39 without charge. It also recodifies current § 133.31(b), (c), (d) (except (d)(3) and (4)), (e), (f), and (g) without change into new § 133.33. Proposed paragraph (f) would prohibit external-load operations in IFR conditions unless specifically approved by the Administrator and would prohibit carrying persons externally in IFR conditions.

A review of current § 133.31 indicates that some of its provisions are not appropriate in Subpart C, Operating Rules and Related Requirements. Therefore, this notice proposes to redesignate § 133.31(a) and (c) as §§ 133.11(b) and 133.21(c), respectively, and incorporate the provisions of current § 133.31(d)(3) and (4) into proposed § 133.37. Existing § 133.33 would be redesignated as § 133.39.

This proposal would provide flexibility in conducting external-load operations in IFR conditions. Certain operations may be approved to operate en route IFR over remote routes while in a load-combination configuration. This would eliminate the need for an

operator to delay trip in remote areas when IFR weather conditions prevail.

To ensure an appropriate level of safety, this proposal would prohibit external-load operations in IFR conditions when a person is being carried externally. This is considered necessary to ensure the safety of that person.

34. By adding a new § 133.35 to read as follows:

§ 133.35 Carriage of persons.

(a) No certificate holder may allow a person to be carried during rotorcraft external-load operations unless that person—

(1) Is a flight crewmember;

(2) Is a flight crewmember trainee;

(3) Performs an essential function in connection with the external-load operation; or

(4) Is necessary to accomplish the work activity directly associated with that operation.

(b) No certificate holder may allow more than one person to be carried as a Class D load or allow that person to be carried more than 10 nautical miles.

(c) The pilot in command shall ensure that all persons are briefed before takeoff on all pertinent procedures to be followed (including normal, abnormal, and emergency procedures) and equipment to be used during the external-load operation.

Explanation: This proposal provides for the carriage of persons during external-load operations and limits the number of persons that can be carried as an external load and the distance the person can be carried. It also provides for briefing persons carried during external-load operations.

Current § 133.45(a) (proposed § 133.35(a)) was the subject of special concern by both operators and manufacturers during the conference because of economic hardships and reported inconsistencies in application by various FAA offices. Industry representatives raised valid arguments that favor limited carriage of persons during Class A external-load operations, but generally agreed that there is a significant increase in the danger level and that nonessential persons should not be carried.

This proposal would continue to limit the carriage of persons during external-load operations to those persons essential to the operation or needed to accomplish work activity associated with that operation. To ensure the highest level of safety in air transportation, the FAA must continue to require passengers to be carried under the provisions of Part 121, 127, or 135, except when the passengers are carried under the limited provisions as a Class D external-load.

Paragraph (b) would be included to prohibit operators from conducting long-range transportation of persons while in a Class D configuration. While considered to be limiting in distance, the FAA has determined this limitation is necessary to ensure the safety of the person being transported.

The requirement that persons be briefed before takeoff is necessary to ensure the safety of all persons carried during the operation.

Ref: Proposal 532; Committee III.

35. By adding a new § 133.37 to read as follows:

§ 133.37 Crewmember training, currency, and testing requirements.

(a) No certificate holder may use, nor may any person serve, as a pilot in operations conducted under this Part unless that person—

(1) Has successfully demonstrated to the Administrator knowledge and skill with respect to the rotorcraft-load combination in accordance with § 133.23. In the case of a pilot other than the chief pilot or an assistant chief pilot who has been designated in accordance with § 133.21(b), this demonstration may be made to the chief pilot or assistant chief pilot; and

(2) Has in his or her personal possession a letter of competency or an appropriate logbook entry indicating compliance with paragraph (a)(1) of this section.

(b) No certificate holder may use, nor may any person serve, as a crewmember or other operations personnel in Class D operations conducted under this Part unless, within the preceeding 12 calendar months, that person has successfully completed either an approved initial or recurrent training program.

(c) Notwithstanding the provisions of paragraph (b) of this section, a person who has performed a rotorcraft external-load operation of the same class and type within the past 12 calendar months need not undergo recurrent training or testing.

Explanation: This proposal recodifies current § 133.31(d) (3) and (4) and amends these provisions to allow designated assistant chief pilots to conduct the pilot's knowledge and skill test. It also would require external-load operators to establish and maintain FAA-approved initial and recurrent training programs to ensure crewmember competency.

Proposed paragraphs (a)(1) (ii) and (iii) are in keeping with the proposal to allow and external-load operator to designate qualified assistant chief pilots in areas of operation where the chief pilot would not be readily available. (See proposal 5–28).

The current rule does not provide for crewmember training, testing, or currency once a pilot has shown competency in each rotorcraft-load combination. With the authorization to carry passengers as loads under Class D, currency and competency for all persons associated with the operation are essential for the safety of the passenger. The proposal would allow substituting currency in the class of operation for the recurrent testing and training requirements.

36. By amending § 133.41 by revising the first sentence of paragraph (a) and the introductory text of (c) and by revising paragraph (c)(5) to ready as follows:

§ 133.41 Flight characteristics requirements.

(a) The applicant must demonstrate to the Administrator, by performing the operational flight checks prescribed in paragraphs (b), (c), and (d) of this section, as applicable, that the rotorcraft-load combination has satisfactory flight characteristics, unless these operational flight checks have been demonstrated previously and the rotorcraft-load combination flight characteristics were satisfactory. * * *

* * * * *

(c) *Class B & D rotorcraft-load combinations:* The operational flight check must consist of at least the following maneuvers:

* * * * *

(5) Demonstrating appropriate lifting device operation.

Explanation: This proposal would delete the requirement for a rotorcraft external-load operator to demonstrate the operations flight check prescribed in § 133.41(b), (c), and (d) if those checks have been demonstrated previously and the rotorcraft-load combination flight characteristics were satisfactory. This proposal also adds the operational flight check requirements for a new Class D rotocraft-load combination as required by § 133.41(c).

Most helicopter manufacturers perform load combination operational flight tests with various external-load attaching devices during the rotorcraft certification process and include this information in the supplement section of the FAA-approved flight manual for that rotorcraft. This proposal relieves a regulatory burden by reducing the number of operational flight checks that a rotorcraft external-load applicant or a

certificated external-load operator is required to demonstrate to the Administrator. This could result in a significant cost savings to the operator.

In addition, revised § 133.41(c) establishes the flight maneuvers required for demonstrating satisfactory flight characteristics required in paragraph (a) for the new Class D rotorcraft-load combination. The current rule prohibits the external lifting of persons with a hovering helicopter. It was the consensus at the conference that a new Class D rotorcraft-load combination should be authorized to accomplish this function. For further definition of the Class D rotorcraft-load combination, see the explanation for the proposed changes to Part 1, Definitions, and § 133.1, Applicability.

Ref: Proposals 526 and 527; Committee III.

37. By amending § 133.45 by removing paragraph (a); by redesignating paragraphs (b), (c), (d), and (e) as paragraphs (a), (b), (c), and (d), respectively; and by adding a new paragraph (e) to read as follows:

§ 133.45 Operating limitations.

* * * * *

(e) The rotorcraft-load combination of Class D may be conducted only in accordance with the following:

(1) The rotorcraft to be used must have been type certificated under transport Category A for the operating weight and provide hover capability with one engine inoperative at that operating weight and altitude.

(2) The rotorcraft must be equipped to allow direct radio intercommunication among required crewmembers.

(3) The personnel lifting device must be FAA approved.

(4) The lifting device must have an emergency release requiring two distinct actions.

Explanation: This proposal establishes airworthiness requirements for conducting Class D operations.

The provisions of this proposal were recommended by the special committee formed during the conference. For further discussion, refer to the Explanation of proposed §133.1

38. By revising § 133.47(c)(2) to read as follows:

§ 133.47 Rotorcraft-load combination flight manual.

* * * * *

(c) * * *

(2) Precautionary advice regarding static electricity discharges for Class B, Class C, and Class D rotorcraft-load combinations; and

* * * * *

Explanation: This proposal would add Class C and the proposed new Class D rotocraft-load combinations to the current flight manual requirements regarding static electricity discharges.

The current rule requires that precautionary advice regarding static electricity discharges for a Class B rotorcraft-load combination be listed in the information section of the Rotocraft-Load Combination Flight Manual. Since Class C and the proposed New Class D load combinations also would be subject to static electricity buildup, it would be appropriate to include those classes in the information section of the manual.

Ref: Proposals 4 and 534; Committee III.

39. By revising § 133.51 to read as follows:

§ 133.51 Airworthiness certification.

A Rotocraft External-Load Operator Certificate is a current and valid airworthiness certificate for each rotorcraft type certificated under Part 27 or Part 29 of this chapter (or their predecessor parts) and listed by registration number on a list attached to the certificate, when the rotorcraft is being used in operations conducted under this part.

Explanation: The proposal would provide for a change in § 133.51 by authorizing a list of rotorcraft by registration number to be attached to a rotorcraft external-load operator certificate, which would, in effect, make that certificate a current and valid airworthiness certificate for each rotorcraft being used in operations under this part. The current rule requires that rotorcraft be listed by registration number on the rotorcraft external-load operator certificate for that certificate to be a current and valid airworthiness certificate for those rotorcraft. A related proposal to change § 133.25 would provide for an external-load operator to submit for approval a list of rotorcraft by registration number when adding or deleting rotorcraft from a certificate. Another related proposal to change § 133.27 would require that the list be kept at the certificate holder's home base of operations. This proposed change is necessary for consistency with the proposed changes to §§ 133.25 and 133.27. See the explanation for the related proposals.

Ref: Proposals 510, 514, 515, 516, and 535; Committee III.

PART 135—AIR TAXI OPERATORS AND COMMERCIAL OPERATORS

40. By revising § 135.1(b)(4)(vi) to read as follows:

§ 135.1 Applicability.

* * * * *

(b) * * *

(4) * * *

(vi) Powerline pipeline patrol, or similar types of patrol approved by the Administrator;

* * * * *

Explanation: This proposal would exclude patrol operations from the requirements of Part 135. The current rule excludes powerline and pipeline patrols but allows a general interpretation to include other types of patrol. Similar types of patrols, such as patrols of rail lines, are similar to poweline or pipeline patrols and can be conducted with equal safety under similar conditions. The proposed § 135.1(b)(4)(vi) retains adequate control by requiring operators to obtain FAA approval for similar types of patrols. This proposal does not change the intent of the rule, but is clarifying in nature and relaxes economic burdens on operations of this type.

Ref: Proposals 538; Committee III.

41. By revising § 135.23(a) to read as follows:

§ 135.23 Manual contents.

* * * * *

(a) The name of each management person required under § 135.37(a) who is authorized to act for the certificate holder, the person's assigned area of responsibility, the person's duties, responsibilities, and authority, and the name and title of each person authorized to exercise operational control under § 135.77;

* * * * *

Explanation: Section 135.77 requires listing in the operator's manual the names and titles of persons authorized to exercise operational control. Section 135.23 currently does not reflect the same requirement. This proposal would resolve the inconsistency and possible misunderstanding between §§ 135.77 and 135.23 and provide Part 135 operators with a clearer statement of the regulatory requirement to list management personnel.

Ref: Proposal 541; Committee III.

42. By revising § 135.39(b)(2)(i) to read as follows:

§ 135.39 Management personnel qualifications

* * * * *

(b) * * *

(2) * * *

(i) Hold a current, commercial pilot certificate with an instrument rating. If an instrument rating is not required for the pilot in command under this Part, the

chief pilot must hold a current, commercial pilot certificate; and

* * * * *

Explanation: Under this proposal, regulatory relief would be provided by establishing the same certificate requirements for the chief pilot as for the certificate holder's pilots in command. Current management personnel qualifications require the chief pilot of a certificate holder who is not conducting operations for which the pilot in command is required to hold an Airline Transport Pilot Certificate to hold a commercial pilot certificate with an instrument rating. This rule is restrictive for rotorcraft operators conducting VFR operations exclusively.

The proposed rule change would be consistent with the intent of this rule to ensure the operational background of management is consistent with the types of operations being conducted. Although deviation authority from this requirement exists in § 135.39(d), this proposal would relieve the rotorcraft operator from a potentially time-consuming deviation process.

Ref: Proposal 542; Committee III.

43. By revising § 135.117(c) and by adding new paragraphs (d), (e), and (f) to read as follows:

§ 135.117 Briefing of passengers before flight.

* * * * *

(c) The oral briefing required by paragraph (a) of this section shall be given by the pilot in command or a crewmember.

(d) Notwithstanding the provisions of paragraph (c) of this section, for aircraft certificated to carry 19 passengers or less, the oral briefing required by paragraph (a) of this section shall be given by the pilot in command, a crewmember, or other qualified person designated by the certificated holder and approved by the Administrator.

(e) The oral briefing required by paragraph (a) shall be supplemented by printed cards which must be carried in the aircraft in locations convenient for the use of each passenger. The cards must—

(1) Be appropriate for the aircraft on which it is to be used;

(2) Contain a diagram of, and method of operating, the emergency exists; and

(3) Contain other instructions necessary for the use of emergency equipment on board the aircraft.

(f) The briefing required by paragraph (a) may be delivered by means of an approved recording playback device that is audible to each passenger under normal noise levels.

Explanation: The proposal would allow passenger briefings for certain aircraft operations to be conducted by qualified persons other than the pilot in command or crewmembers. It also would allow the use of an approved recording playback device for the passenger briefing before flight, provided the device used is audible and understandable in the aircraft cabin or facility where the briefing is conducted.

The intent of this section is to ensure that the passengers are briefed before flight. This can be accomplished through the use of an approved recording device. For aircraft certificated to carry 19 passengers or less, the briefing can be conducted by an approved, qualified person other than a crewmember. This would reduce the pilot-in-command workload, particularly in helicopter operations where short stage lengths are frequently encountered. The proposal would not relieve the pilot in command of his or her responsibility under § 135.117(a) to ensure that all passengers are briefed.

Ref: Proposal 550; Committee III.

44. By amending § 135.159 by revising paragraph (a) and by adding new paragraphs (g) and (h) to read as follows:

§ 135.159 Equipment requirements: Carrying passengers under VFR at night or under, VFR over-the-top conditions.

* * * * *

(a) A gyroscopic rate-of-turn indicator combined with a slip-skid indicator except that helicopters having a maximum certification takeoff weight of 6,000 pounds or less require only a slip-skid indicator;

(g) Notwithstanding the provisions of paragraph (b) of this section, helicopters having a maximum certificated takeoff weight of 6,000 pounds or less may be operated until (1 year after the effective date) under visual flight rules at night without a bank-and-pitch indicator, subject to the route of flight being approved by the certificate-holding district office.

(h) Notwithstanding the provisions of paragraphs (a) and (c) of this section, helicopters having a maximum certificated takeoff weight of 6,000 pounds or less may be operated until (1 year after the effective date) under visual flight rules at night without a slip-skid or direction indicator.

Explanation: This proposal would delete the requirement for helicopters to have a turn indicator and allow a 1-year period from the effective date of this proposed rule to acquire and install attitude, heading, and slip-skid instruments. VFR night and over-the-top helicopter operations can be conducted safely with attitude, heading, and slip-skid indicators. These instruments have been required in airplanes since 1964 and they provide the pilot instantaneous cockpit information on aircrasft control. To provide an acceptable level of safety in passenger-carrying operations, a helicopter must be controllable during loss of visual ground reference.

Helicopter air taxi operators are presently authorized by exemption (No. 2695B; August 29, 1980) to conduct VFR night operations without the instruments required by § § 135.159 (a) and (c). This temporary exemption was granted to avoid undue economic burden while standards are presented and examined in the rotorcraft review.

On conference proposal recommends that the gyroscopic flight instruments required by § 135.159 not apply to helicopters for night VFR operations. There are many areas of operations, such as over water or sparsely populated terrain, where there is a lack of visual reference for aircraft control. The gyroscopic flight instruments required by § 135.159 provide the pilot with positive and immediate flight attitude and heading information, thereby ensuring a higher level of safety for operations conducted under this part. Moreover, no justification is presented by the proponent to show that operations conducted at night in helicopters require less instrumentation than airplanes to acquire the level of safety expected of air carriers.

Ref: Proposal 552; Committee III.

45. By amending § 135.167 by redesignating paragraph (b) as (c); by revising paragraphs (a)(1) and (2) and adding a new paragraph (b) to read as follows:

§ 135.167 Emergency equipment: Extended overwater operations.

* * * * *

(a) * * *

(1) An approved life preserver equipped with an approved survivor locator light for each occupant of the aircraft. The life preserver must be easily accessible to each seated occupant.

(2) Enough approved life rafts of a rated capacity and buoyancy to accomodate the occupants of the aircraft.

(b) Each life raft required by paragraph (a) of this section must be equipped with or contain at least the following:

(1) One approved survivor locator light.

(2) One approved pyrotechnic signaling device.

(3) Either—

(i) One approved survival kit, appropriately equipped for the route to be flown; or

(ii) One canopy (for sail, sunshade, or rain catcher);

(iii) One radar reflector;

(iv) One life raft repair kit;

(v) One bailing bucket;

(vi) One signaling mirror;

(vii) One police whistle;

(viii) One raft knife;

(ix) One CO_2 bottle for emergency inflation;

(x) One inflation pump;

(xi) Two oars;

(xii) One 75-foot retaining line;

(xiii) One magnetic compass;

(xiv) One dye marker;

(xv) One flashlight having at least two size "D" cells or equivalent;

(xvi) A 2-day supply of emergency food rations supplying at least 1,000 calories per day for each person;

(xvii) For each two persons the raft is rated to carry, two pints of water or one sea water desalting kit;

(xviii) One fishing kit; and

(xix) One book on survival appropriate for the area in which the aircraft is operated.

* * * * *

Explanation. Section 135.167 currently requires operators conducting extended overwater operations to carry an approved life preserver with an approved survivor locator light or an approved flotation means for each occupant of the aircraft. It also requires operators to carry enough life rafts to carry all occupants of the aircraft and specifies survival and rescue equipment that must accompany each life raft.

This proposal would eliminate the provision that allows carriers to provide flotation devices other than life preservers with an approved survivor locator light during extended overwater operations. The proposal also would require life rafts be of an approved type and that each be equipped with a survivor locator light, a pyrotechnic signaling device, and either a survival kit appropriately equipped for the route to be flown or specifically identified survival equipment. This aligns the Part 135 requirements with those of part 121.

A National Transportation Safety Board recommendation cited a night ditching of an air carrier aircraft with 8 crewmembers and 68 passengers abroad. The only light available outside the aircraft was a flashlight carried by the captain. Passengers had difficulty locating the rafts and one another in the water. Had the raft been lit and there been a light installed on each life jacket, more passengers and crewmembers may have survived.

Response time and number of rescuers, availability of artificial light, and varied climatic conditions associated with water rescue attempts affect the efforts of rescuers. Often the length of survivor exposure to the environment is a critical element in the relative success of these rescue operations. Locator lights on preservers and rafts will likely reduce the amount of time associated with finding and retrieving survivors from water and increase their chances of survival with a minimal economic impact on air carriers.

The proposed rule change also would allow operators, who are most familiar with their areas of operation, to develop survival kits that will enhance their usefulness in a particular environment. Present regulatory requirements for survival kits prescribe equipment that may not serve a useful purpose in some geographical locations.

This proposal would provide greater flexibility in developing survival kits required under § 135.167 and provide a higher level of safety to the flying public. Adequacy of the survival kit is ensured by FAA inspection of the contents for appropriateness in a particular operation. Adopting this proposal will align the Part 135 requirements with those of Part 121 and relieve operators of the economic burdens of requiring survival equipment not appropriate to their area of operation.

Ref: Proposal 555; Committee III.

46. By amending § 135.173 by redesignating paragraphs (b), (c), (d), and (e) as (c), (d), (e), and (f), respectively; by amending redesignated paragraph (c) by inserting the phrase "or (b)" after the words "required by paragraph (d)"; by revising paragraph (a), and adding a new paragraph (b) to read as follows:

§ 135.173 Airborne thunderstorm detection equipment requirements.

(a) No person may operate an aircraft that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more in passenger-carrying operations, except a helicopter operating under day VFR conditions, unless the aircraft is equipped with either approved thunderstorm detection equipment or approved airborne weather radar equipment.

(b) After (1 year after the effective date), no person may operate a helicopter that has a passenger seating configuration, excluding any pilot seat, of 10 seats or more in passenger-carrying operations, under night VFR when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with airborne thunderstorm detection equipment may reasonably be expected along the route to be flown, unless the helicopter is equipped with either approved thunderstorm detection equipment or approved airborne weather radar equipment.

* * * * *

Explanation: Current § 135.173 requires all small multiengine aircraft having a passenger seating configuration of 10 or more that are used in passenger-carrying operations to have approved thunderstorm detection equipment installed in the aircraft.

The words "small multiengine" would be removed to ensure all aircraft with a passenger seating configuration of 10 seats or more that are not required to meet the provisions of § 135.175 have thunderstorm detection equipment installed. Current regulatory requirements do not allow single-engine airplanes with 10 passenger seats or more to conduct operations under Part 135.

The proposal also would allow helicopter operators to perform short-range, VFR operations at an appropriate level of safety without the additional expense of installing thunderstorm detection devices.

Under the proposed § 135.173(a), the requirement for thunderstorm detection equipment would not apply to helicopters in VFR conditions during the day. The requirement for thunderstorm detection equipment for helicopters in VFR conditions at night also would be deleted, except when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with an airborne weather detection device may reasonably be expected along the route to be flown. Under night VFR conditions, the certificate holder has the option to delay the flight until the weather improves or use helicopters equipped with either approved thunderstorm detection or approved airborne weather radar equipment.

Helicopters are highly maneuverable and have the capability to adjust altitude and direction rapidly. If thunderstorms or adverse weather is encountered, the helicopter can change its altitude, airspeed, and direction rapidly to circumnavigate or avoid the thunderstorm. Although the helicopter also has the ability to land in small areas and can use this ability to avoid hazardous weather conditions, this advantage is not significant during VFR night operations when a landing option may not be available, such as when over water, forests, mountainous or

congested areas, or when visibility is restricted.

Ref: Proposal 557; Committee III.

47. By amending § 135.181 by redesignating paragraphs (b) and (c) as (c) and (d), respectively; and by adding a new paragraph (b) to read as follows:

§ 135.181 Performance requirements: Aircraft operated over-the-top or in IFR conditions.

* * * * *

(b) Notwithstanding the restrictions in paragraph (a)(2) of this section, multiengine helicopters carrying passengers off shore may conduct such operations in over-the-top or in IFR conditions at a weight that will allow the helicopter to climb at least 50 feet per minute with the critical engine inoperative when operating at the MEA of the route to be flown or 1,500 feet MSL, whichever is higher.

* * * * *

Explanation: The proposed rule will allow a decrease in the performance requirements for multiengine helicopters operating in connection with energy exploration and development in the offshore environment in over-the-top or IFR conditions.

The current rule requires all multiengine aircraft to be operated at a weight which allows for at least a 50-foot-per-minute climb with the critical engine inoperative at 5,000 feet MSL or the MEA, whichever is higher. Under this proposed rule, multiengine helicopters must still meet the climb performance of 50 feet per minute with the critical engine inoperative; however, the altitude for computation is adjusted to 1,500 feet MSL of the MEA of the route to be flown, whichever is higher.

The current requirement for computing performance objective using 5,000 feet MSL in an environment where typically MEA's of 1,500 feet exist imposes an economic penalty on operators by requiring an adjustment of payload to meet the higher performance objective. The FAA believes that it is in the public interest to allow the proposed relaxation of performance requirements considering the overwater en route structures with low minimum en route altitudes.

The present rule was established to provide for a minimum performance in multiengine IFR aircraft. Provisions were added to require stricter performance if the MEA's involved were higher than 5,000 feet. This rule penalizes the helicopter used exclusively in offshore operations. It is obvious that a helicopter with the critical engine inoperative that has a climb capability of 50 feet per minute at 1,500 feet MSL will avoid obstacles over water. This is generally true for all coastal areas where the helicopter begins or terminates its offshore flights. If the MEA in the coastal area is over 1,500 feet, the performance requirements of the helicopter are raised to the appropriate MEA.

This proposal further recognizes the unique environment where helicopters are conducting operations in conjunction with offshore exploration/development of energy supplies and makes appropriate allowances in multiengine performance requirements with the critical engine inoperative. IFR operations offshore in support of oil and gas drilling and production activities are expanding with the accelerated petroleum exploration program. In addition to being in the public interest, this proposal will provide economic relief to operators by allowing better utilization of the existing fleet without compromising safety.

48. By revising § 135.223(a)(3) to read as follows:

§ 135.223 IFR: Alternate airport requirements.

(a) * * *

(3) Fly after that for 45 minutes at normal cruising speed or, for helicopters, to fly after that for 30 minutes at normal cruising speed.

* * * * *

Explanation: This proposal would reduce the IFR fuel requirements for helicopters from 45 minutes to 30 minutes.

This proposal highlights the differences between helicopters and airplanes in the IFR environment. While on the surface it would appear that IFR fuel reserves should be the same for airplanes and helicopters, the differences in aircraft become apparent in the capabilities and limitations of the two categories.

The helicopter has the unique ability to reduce airspeed on approach to as low as 40 knots and is provided reduced visibility minimums in Part 97. The minimums in Part 97 for helicopters are, in some cases, the same as Category II minimums for airplanes. Criteria to determine if an alternate airport is required are contained in the proposed change to § 91.23.

The helicopter being dispatched must carry a larger percentage of its fuel capacity as reserve than the normal airplane. Because the helicopter, with its reduced minimums, has a better probability of completing the flight to the planned destination, it should be given this recognition by allowing for a reduced fuel reserve. Often helicopters are denied the ability to initiate flights simply because too much fuel is required to be carried for reserve.

The FAA has gained sufficient experience in SFAR 29 operations to conclude that reducing the required fuel reserve to 30 minutes for helicopters will not compromise safety.

This proposal would allow operators greater flexibility and utilization of their helicopters in the IFR environment.

Ref: Proposal 562; Committee III.

49. By amending § 135.227 by redesignating paragraphs (c) and (d) as (d) and (e), respectively; by amending newly designated paragraph (e) by inserting the phrase "the restrictions in paragraphs (b), (c), and (d)" in place of "the restrictions in paragraphs (b) and (c)"; and by adding a new paragraph (c) to read as follows:

§ 135.227 Icing conditions: Operating Limitations.

* * * * *

(c) No pilot may fly a helicopter under IFR into known or forecast icing conditions or under VFR into known icing conditions unless it has been type certificated and appropriately equipped for operations in icing conditions.

* * * * *

Explanation: There are no provisions currently in § 135.227 to allow helicopters to fly in icing conditions. Testing and developing ice protection equipment is currently being conducted by helicopter manufacturers. Although no helicopters are now certificated for operations in icing conditions, Rotorcraft Review Program Amendment No. 1 provides the mechanism for this certification. Therefore, it is appropriate to amend the operating rule to allow the use of these helicopters when they are available.

Ref: Proposal 564; Committee III.

50. By amending § 135.429 by redesignating paragraph (d) as (e) and by adding a new paragraph (d) to read as follows:

§ 135.429 Required inspection personnel.

* * * * *

(d) In the case of rotorcraft that operate in remote areas or sites, the Administrator may approve procedures for the performance of required inspection items by a pilot when no other qualified person is available, provided—

(1) The pilot is employed by the certificate holder;

(2) It can be shown to the satisfaction of the Administrator that each pilot authorized to perform required inspections is properly trained and qualified;

(3) The required inspection is a result of a mechanical interruption and is not a part of a certificate holder's continuous airworthiness maintenance program;

(4) Each item is inspected after each flight until the item has been inspected by an appropriately certificated mechanic other than the one who originally performed the item of work; and

(5) Each item of work that is a required inspection item that is part of the flight control system shall be flight tested and reinspected before the aircraft is approved for return to service.

* * * * *

Explanation: This proposal allows rotorcraft operators to have inspection items required by § 135.427(b)(2) inspected by properly trained and qualified pilots in remote areas or sites.

Current § 135.429 sets forth the requirements for inspection personnel and prohibits a person from performing a required inspection if that person performed the work that is required to be inspected.

Discussions during the conference indicate that circumstances may exist that relate to rotorcraft operations at remote offshore sites and continued operation for significant periods of time in remote areas where housing is not available. The location or size of the site does not make it readily accessible by ground, sea, or air transportation. This proposal is not intended to delete the need for a certificate holder to identify and accomplish required inspection items. It is intended to allow a certificate holder the opportunity to provide a system that will accomplish the same level of safety as required by § 135.429(c) when an unscheduled malfunction occurs and inspection is accomplished under the direct control of the certificate holder's inspection unit.

It was recommended at the conference that § 135.411(a)(2) be deleted for all rotorcraft, which also would delete the requirements of §§ 135.427(b)(2) and 135.429(c) for all rotorcraft, regardless of passenger carrying capability or the area of operation. Designating required inspection items and ensuring their proper performance are necessary for the safe operation of an aircraft. The proponent did not present sufficient justification to delete these requirements. For an explanation of the disposition of these comments, refer to the discussion of proposed § 135.411(a)(2) in Appendix I—Miscellaneous Proposals Removed From Further Consideration from the Rotorcraft Regulatory Review Program.

Ref: Proposal 568: Committee III.

Appendix A—Miscellaneous Proposals Removed From Further Consideration From the Rotorcraft Regulatory Review Program

Based on the FAA's review of the discussions at the Rotorcraft Regulatory Review Conference, the Rotorcraft Review Meeting, and the information submitted by interested persons, the following proposals considered at the conference are removed from further consideration for the reasons listed below:

14 CFR (FAR section)	Proposal No.	Committee	Proponent
Section 27.601	85		NTSB.
Section 29.601	255		NTSB.
Section 43.3(e)	421	III	HAA.
Section 43.3(f)	422	III	HAA.
Section 43.3	423	III	HAA.
Section 43.3	425	III	HAA.
Section 43.9	426	III	HAA.
Section 43.15	427	III	FAA.
Section 43.15(b)	428	III	HAA.
Part 43, Appx. A	431	III	FAA.
Part 61, Subpart F	434	III	I.D. Farrington.
Section 61.3	437	III	Hynes Helicopter, Inc.
Section 61.57	439	III	HAA.
Section 61.65	440	III	FAA.
Section 61.65(d)(4).	441	III	Hynes Helicopter, Inc.
Section 61.131	455	III	Mr. Peter Groenlaw.
Section 61.183	467	III	Hynes Helicopter, Inc.
Section 61.191	468	III	Hynes Helicopter, Inc.
Section 61.193	469	III	Hynes Helicopter, Inc.
Section 61.195	470	III	Hynes Helicopter, Inc.
Section 91.24(b)	485	III	HAA.
Section 91.28(b)(3).	486	III	HAA.
Section 91.116(b)	493	III	HAA.
Section 121.13	498	III	FAA.
Section 127.81	499	III	FAA.
Section 127.103	500	III	ALPA.
Section 127.105	501	III	ALPA.
Section 127.109(c).	502	III	FAA.
Section 127.110 (New).	503	III	FAA.
Section 127.143	504	III	ALPA.
Section 127.147 New.	505	III	FAA.
Section 133.17	510	III	HAA.
Section 133.31(d)(3).	521	III	HAA.
Section 133.45(e)	533	III	HAA.
Section 135.1(b)(4)(v).	537	III	HAA.
Section 135.1(b)(4)(vii).	539	III	HAA.
Section 135.1(b)(7).	540	III	HAA.
Section 135.73(b)	543	III	HAA.
Section 135.73(c)	544	III	HAA.
Section 135.99	546	III	HAA.
Section 135.113	547	III	HAA.
Section 135.15(a)	548	III	HAA.
Section 135.15(c)	549	III	HAA.
Section 135.121(c).	551	III	HAA.
Section 135.165(b), (d).	554	III	HAA.
Section 135.175(a), (b).	558	III	HAA.
Section 135.225(a)(3).	563	III	HAA.
Section 135.293(b), (c).	565	III	NTSB.
Section 135.411(a)(2).	566	III	HAA and AIA
Section 135.415(c).	567	III	HAA.
Section 135.431(a).	569	III	HAA.
Section 43.23(b)	571	III	HAA and AIA.
Section 45.27(a)(2).	572	III	HAA and AIA.
Section 45.29(b)(3).	573	III	HAA and AIA.

Proposals 85 and 255. These proposals would have amended §§ 27.601 and 29.601 to require underwater locating devices on rotocraft used in extended overwater operations. Although Parts 27 and 29 contain certification rules, these proposals would be more appropriately located in operating rules and therefore are addressed in this notice.

Part 135 currently an emergency locator transmitter to be attached to each required liferaft when aircraft are used in extended overwater operations. While this proposal may aid in locating submerged aircraft wreckage, the current rules provide an acceptable level of safety and the proponent has not sufficiently justified its position.

Proposals 421 and 422. These proposals would have amended § 43.3 to authorize repair stations under Part 145 and air carriers and commercial operators under Parts 121, 127, and 135 to perform rebuilding operations. The proponent states that since there is no definition of the term "rebuilding" in the regulations, it is unclear when a major repair becomes a rebuilding operation.

Repair stations are presently authorized to perform major repairs as now defind in Part 1 and Appendix A of Part 43. It is recognized by the FAA that repair stations and air carriers perform major and complex repairs to aircraft. The present regulations allow these persons to restore these aircraft to an airworthy condition using procedures recommended by the manufacturers and, in the case of major repairs, procedures are approved by the FAA. The present regulations only allow the manufacturer of a product to rebuild that product. In light of the proposed changes referred to above, there is insufficient justification to warrant revising § 43.3 as proposed.

In response to the proponent's concerns regarding the definition of "rebuilt," this was addressed in Operations Review Program Amendment No. 12 (47 FR 41076; September 16, 1982), which defines "rebuilt" in § 43.2.

Proposals 423 and 425. These proposals would have amended §§ 43.3 and 43.7 to allow Part 135 operators to perform maintenance, preventive maintenance, and alterations as listed in

Part 43, Appendix A, and to approve aircraft, airframes, aircraft engines, propellers, or appliances for return to service. The intent of these proposals was accomplished in Operations Review Program Amendment No. 12 and no further action is necessary.

Proposal 426. This proposal would exempt Part 135 operators with aricraft type certificated for 10 or more passenger seats from the general maintenance recordkeeping requirements of § 43.9(a). Operations Review Program Amendment No. 12 also accomplished this intent and no further action is necessary.

Proposals 427 and 428. These proposals would have amended § 43.15 by deleting specific sections requiring inspection during 100-hour, annual, or progressive inspections and requiring the rotocraft to be inspected in accordance with the type certificate holder's instructions. This requirement also was included in Operations Review Program Amendment No. 12.

Proposal 431. This proposal would have amended Part 43, Appendix A, to inlcude under powerplant major repairs "disassembly of a turbine engine and associated gear reduction systems."

Since this FAA proposal was made, the FAA issued a notice of proposed Advisory Circular (AC), Aircraft Major Repairs, in an attempt to define those repairs. Substantial public controversy resulted from that notice and subsequent meetings with industry. Comments suggest that a better approach is necessary regarding major repairs. Consequently, the notice was withdrawn to allow the FAA time to develop a better approach to resolving this problem. In light of these efforts, the proposal is dropped from consideration under the Rotocraft Review Program.

Proposal 434. This proposal would have deleted all references to the gyroplane class rating from the Airline Transport Pilot (ATP) certification requirements in Subpart F of Part 61. Several related proposals provided for this change by proposing to delete the gyroplane class rating from the individual sections of Subpart F that have requirements for ATP gyroplane certification. These proposals satisfy the intent of proposal 434, thereby making it unnecessary.

Proposals 437, 469, and 470. This group of proposals would have amended §§ 61.3(d), 61.193(b)(3), and 61.195(d) and adding a new flight instructor provision to each of these sections that would authorize the holder of a flight instructor certificate in powered aircraft to endorse a student pilot's logbook for cross-country flights in either airplanes or helicopters. The current rule requires a flight instructor to be appropriately rated in the category of aircraft to enforse a student pilot's logbook for cross-country flights. Several commenters at the conference, including the FAA, oppose these proposals due to significant difference in performance and flight characteristics between airplanes and helicopters. Factors such as slower airspeeds, lower flight altitudes, relatively short flights due to limited fuel capacity, and the effect of winds on fuel consumption were discussed. The flight instructor authorized to make this kind of endorsement should be aware of the conditions that are unique to helicopters. The current rule provides an acceptable level of safety for student pilots conducting cross-country flights. The proponent does not sufficiently justify the proposed changes to the current rule.

Proposal 439. This proposal would have amended § 61.57(e)(1)(i) to require at least three of the six instrument approaches needed to maintain currency to be conducted in the category of aircraft. The FAA does not agree. This proposal would remove the flexibility from the current rule and would constrain operators from exercising the various regulatory options available to maintain IFR currency. The FAA is not aware of any safety comprise associated with current practice.

Proposal 440. This proposal would have deleted the requirement for 50 hours of cross-country flying in the category of aircraft for which the instrument rating is sought and add the requirement that the cross-country flying be in a powered aircraft. Amendment 61–70, which was published and became effective January 25, 1982 (47 FR 3486), accomplished the intent of this proposal and therefore no further action is necessary.

Proposal 441. This proposal would have revised § 61.65(d)(4) by deleting the requirement for VOR, NDB, and ILS instrument approaches to be demonstrated by an applicant seeking a helicopter instrument rating. The proposed change would allow an applicant to demonstrate compentency by executing either a VOR, NDB, or ILS insturment approach in place of all three approaches now required for helicopter instrument certification at the commercial pilot level. The FAA does not agree with the proposed change, since this is the only time that an applicant is required to demonstrate competency in all three approaches to be Administrator. The proponent states that the requirement to show competency in all three approaches is an undue burden on the operator to equip a helicopter with three types of radio equipment. Such is not the case. Current practices allow an applicant to demonstrate instrument competency in a helicopter, simulator, or training device provided at least one approach is accomplished in flight. This flexibility allows the operator to equip the helicopter with appropriate navigational equipment to conduct either all the approaches or only the single approach in the aircraft.

Proposal 455. This proposal would have revised § 61.131 by changing the total flight time required to obtain a commercial pilot's certificate with a helicopter class rating and to require all flight time to be in helicopters. The current rule requires a total flight time of 150 hours, of which 50 hours must be in helicopters. The proposed change would require a total flight time of 250 hours, all of which would be required in helicopters. Four commenters at the conference, including the FAA, oppose all points of the proposal citing an adverse economic impact with no apparent increase in safety. The proponent does not identify any significant benefits from the proposed change. The present requirement of 150 hours of flight time provides an adequate level of safety for commercial pilot certification in helicopters.

Proposals 467 and 468. These proposals would amended §§ 61.183 and 61.191 to require an applicant for a flight instructor certificate or additional rating on that certificate to have at least 15 hours as a pilot in command in the category and class of aircraft appropriate to the flight instructor rating sought after obtaining a commercial or airline transport pilot certificate in that category. These proposals would increase the pilot-in-command experience level of the applicant so that individual is more comfortable, relaxed, and accustomed to any operating peculiarities of an aircraft before teaching other persons. The FAA does not agree that requiring additional flight time is justified. Commercial pilots have a minimum of 100 hours of pilot-in-command time, which often is in the same category of aircraft for which the flight instructor rating is sought. Requiring an additional 15 hours of flight time in each category and class of aircraft would impose a severe economic burden on the industry.

Proposal 485. This proposal would have deleted the requirement of § 91.24(b) that non-transponder helicopter flights at or below 1,000 feet AGL in a terminal control area (TCA) be conducted under a letter of agreement. The proponent states it is extremely

difficult, if not impossible, for a helicopter operator, especially a transient, to obtain in advance a letter of agreement with a local tower. Moreover, the proponent fails to see what a letter would accomplish since flight below 1,000 feet AGL probably would be below radar surveillance coverage.

Terminal control areas are established to provide positive control within busy, high-density airport areas. This concept depends upon aircraft being subject to certain operating rules and pilot/equipment requirements. The transponder requirement was suspended for non-transponder helicopter operations below 1,000 feet AGL; however, to provide for continuity of positive control in a TCA, letters of agreement are required.

The letter of agreement provides air traffic control (ATC) an additional effective means of exercising positive control. The agreements form the critical base of understanding between ATC and the helicopter pilot/operator regarding non-transponder, low-altitude operations within a high-density area. Depending on local needs, the agreements may stipulate in advance the routes that will be flown, altitudes to be used, holding points, emergency or special call signs, expected radio frequencies to be used, entry and departure points of a TCA, and any special procedure to be implemented. In effect, these letters of agreement serve as tools with which ATC may identify and consequently separate non-transponder helicopter operations from the flow of other traffic in the TCA. This information is effective whether or not radar surveillance can be maintained. Where necessary, those non-transponder helicopter operations that cannot be conducted under a letter of agreement usually can be accommodated on an individual basis under § 91.24(c), "ATC authorized deviations."

Proposal 486. This proposal would have deleted the term "of U.S. manufacture" from § 91.28(b)(3) to allow a foreign manufacturer to obtain a special flight authorization. Amendment 91–178 (47 FR 13312; March 29, 1982) revised § 91.28 and incorporates the intent of the proposal. Therefore, no further action is necessary.

Proposal 493. This proposal would have revised the landing minimums prescribed in § 91.116 by authorizing pilots operating helicopters under IFR to reduce the landing minimums and lower the ceiling minimums contained in Part 91 for standard instrument approach procedures not limited to helicopters. It would reduce the landing visibility minimums by 50 percent and lower the ceiling minimums for decision height (DH) or minimum descent altitude (MDA) to not less than 100 feet above field elevation for helicopters. During the discussion at the conference, the proponent requested that the phrase "MDA may not be lower than 100 feet" be removed from the proposal. The proponent agreed to amend the proposal by dropping "MDA" and retaining "DH may not be lower than 100 feet."

The proposed changes were based on the premise that the DH for helicopters could be less than for airplanes due to factors such as instant power response, no change in flight configuation for a missed approach, and the helicopter 's capability to quick-stop and hover in V_{MC}. The FAA recognizes these substantially different flight characteristics and has authorized reducing landing visibility minimums by 50 percent for helicopters only in Chapter II of the Terminal En Route Procedures (TERPS) Manual for Part 97 standard instrument approach procedures. However, a general reduction of the decision height for helicopters cannot be done. Of the approximately 750 published ILS approach procedures in the United States, only 65 have been demonstrated to be of sufficient reliability to conduct operations below 200 feet above airport elevation. Before helicopters would be allowed to use the reduced ceiling minimums, each of the ILS approach facilities are required to be flight checked for accuracy down to those reduced minimums and must meet the integrity and continunity of service requirements for Type II ILS equipment and be published as an approved "copter procedure." The 65 approved approaches are classified as Type II or Type III ILS facilities and would be authorized for approval of Category II approaches. Section 91.2 of this notice proposed to allow helicopters to apply for Category II authorizations at these facilities. Since published Cateogy I ILS instrument approach procedures do not contain information concerning the accuracy and reliability of the ILS system below 200 feet above airport elevation, the proposed change could place helicopters in a hazardous situation when executing ILS instrument approaches at facilities which have not been demonstrated to be reliable below 200 feet. The current rule and the proposed change to § 91.2 provide an adequate level of safety and this recommended change does not sufficiently justify reducing that level of safety.

Proposals 498 through 505. These proposals to amend § 121.13 and Part 127 would have upgraded existing regulations and added provisions to require shoulder harnesses and flight attendants for helicopter operations under these parts. Part 127, however, is the subject of other rulemaking and § 121.13 will be amended in that regulatory effort. Therefore, these proposals will not be considered a part of the Rotocraft Regulatory Review Program but will be addressed in the proposal to amend Part 127.

Proposal 510. This proposal would have deleted the requirement in § 133.17 that specific rotorcraft be authorized when issuing a Rotorcraft External-Load Operator Certificate. The proposed change would authorize rotorcraft to be listed only by type. Since the airworthiness requirements in Subpart D of Part 133 require satisfactory demonstration of rotorcraft-load combination flight characteristics, it is necessary to retain the provision in § 133.17 for specific rotorcraft to be listed to provide a means of identification. However, Proposal 515 would revise § 133.25 by allowing an operator to add or delete a specific rotorcraft by submitting a new list of rotorcraft by "N" number and rotorcraft-load combintion to the FAA district office. Also, Proposal 526 would delete the requirement in § 133.41 for satisfactory demonstration of the rotorcraft-load combination flight characteristics, provided they have been previously demonstrated. These two proposed changes would be relieving by simplifying the certification and amendment process, thus reducing time delays for external-loan operators. The intent of Proposal 510 would be satisfied by these two proposals.

Proposal 521. This proposal would have revised § 133.31(d)(3) by authorizing the chief pilot for an external-load operator to conduct the knowledge and skill test required of pilots employed by the company. It would also delete the requirement in the current rule for an entry to be made in the pilot's logbook concerning his competency as a pilot to conduct external-loan operations and would require this information to be kept within the certificate-holder's records. The current rule provides for the knowledge and skill test to be demonstrated to the Administrator or to the company's chief pilot and for an entry to be made in the pilot's logbook. The proposed change would, the effect remove the authority of the Administrator to conduct any knowledge and skill tests and place a regulatory requirement on the individual external-load operator to conduct all of

these tests. The FAA disagrees with the proposed change. The current rule provides an acceptable level of safety and no change is necessary.

Proposal 533. This proposal would have revised § 133.45(e) by authorizing restricted category rotorcraft to conduct external-load operations over a densly populated area, in a congested airway, or within a terminal control area or control zone subject to permission of the appropriate air traffic control facility. The current rule prohibits restricted category rotorcraft from conducting operations over a densly populated area, in a congested airway, or near a busy airport where passenger transport operations are conducted. The rule has never provided for the use of restricted category rotorcraft in these areas. However, a limited number of exemptions were issued in the past to allow restricted category rotorcraft to operate in these areas. Issuing those exemptions was considered in the public interest at the time because the services provided were beyond the capability of standard category rotorcraft. None of these exemptions is in effect today. The rotorcraft industry has grown to the state where the use of restricted category rotorcraft in the areas proposed is not in the public interest. This proposal received only one favorable comment at the conference. The current rule provides an adequate level of safety for the public.

Proposals 537 and 539. These proposals recommend deleting the phrase "(but not including transportation to and from the site of operations)" from § 135.1(b)(4)(v). Helicopters performing construction or repair work do not have to comply with the provisions of Part 135. The proponent states that transporting persons to and from the construction or repair site also should be excluded from meeting Part 135 requirements.

The FAA recognizes that some aerial work operations are not intended to be included under this section. However, transportation to and from the site of operations are air taxi operations and are included within the parenthetical statement that the proponent desires to drop. The applicability section of § 135.1(a), plus many legal interpretations and policy guidance documents, all state that transportation for compensation or hire of persons and/or property in an aircraft size identified in Part 135 is an air taxi or commercial operation.

The proponent also recommends allowing any other aerial work operation specified or approved by the Administrator to be conducted without compliance with Part 135. This could allow operations outside the scope of a rule without public comment and could be contrary to the Administrative Procedures Act.

Proposal 540. This proposal would delete § 135.1(b)(7) which excludes certain helicopter flights from meeting the reguirements of Part 135. Considering the limited number of operations that fall under this exclusion and the high economic impact these operators would incur if required to comply with the requirements of Part 135, it is not appropriate to consider deleting paragraph (b)(7) at this time.

Proposal 543. The proponent recommends a rule that would prohibit the Administrator from removing a paying passenger or necessary crewmember for the purpose of conducting inspections or tests, including en route inspections. This proposal is dropped because the ability of the FAA to conduct inspections or tests is necessary in the interest of safety. One purpose of the inspection or test is to observe the required crewmembers performing their duties. The FAR do not allow an FAA inspector to remove a required crewmember. The required crewmembers are identified in Part 135 and the aircraft certification requirements. The words "necessary crewmember" may or may not have the same meaning.

Proposal 544. This proposal recommends that the certrificate holder not be required to install a headset, speaker, or forward observer seat for use by the FAA during en route inspection if the certificate holder has to modify the aircraft. It is essential that these items be provided so that the FAA may properly perform en route inspections and thus ensure a continuing level of safety for the public.

Proposal 546. This proposal would have allowed helicopters with initial or amended type certificates issued before December 31, 1981, to operate without a second in command in VFR, non-commuter operations with an approved autopilot or stability augmentation system. After reviewing the proposal and comments, the FAA concludes that the aircraft and crew requirements imposed on airplanes are valid for all aircraft configured for 10 or more passenger seats. The FAA is responsible for ensuring as high a level of safety as practicable for the traveling public. This responsibility is not limited to passengers purchasing tickets on a large scheduled or commuter air carrier. The helicopter is no less demanding than an airplane which requires two pilots for similar operations. These operators are playing an increasingly important role in the air transportation industry and have demonstrated a strong growth rate.

Proposal 547. This proposal would have authorized any employee of a Part 135 certificate holder or any airman authorized by the certificate holder to occupy a pilot seat of an air taxi aircraft with more than eight passenger seats, excluding any pilot seat. The stated intent was to provide transportation and training for personnel employed by the certificate holder. Sufficient justification was not presented to warrant further consideration.

The FAA has consistently held that flight training may not be conducted in air carrier passenger operations. The air carrier approved pilot training program must be completed before assigned pilot duties on an air taxi flight. If adopted, this proposal would erode the operator's training program for new pilots. Sections 135.53 and 135.113 limit the occupancy of the other pilot seat in these aircraft to the personnel stated in the rule.

Proposal 548 and 549. This proposal would have allowed any pilot employed by the Part 135 certificate holder to manipulate the controls of an aircraft in air taxi service even though the pilot training and testing program had not been completed and the person was not qualified in the aircraft. The air taxi rule was specifically changed to prohibit this. Before the change the FAA received numerous pasasenger complaints which stated that persons other than the pilot were manipulating the controls on passenger-carrying air taxi flights, resulting in erratic aircraft performance, particularly during takoffs and landings. The passengers state that they should not be subjected to this unsafe performance on air taxi flights. Part 135 was changed to upgrade the level of safety to specifically prohibit this action.

Proposal 551. The proposal would modify § 135.121(c) to prohibit the boarding on an aircraft of persons under the influence of drugs. Section 91.11(b) prohibits a person from carrying a person obviously under the influence of drugs. Therefore, the intent of this proposal is already being accomplished.

Proposal 554. This proposal would have reduced the radio communications and navigation equipment required for helicopters engaged in overwater operations provided the operations are conducted under VFR conditions. The equipment proposed for extended overwater operations is more lenient than present § 135.165 and does not provide for any backup radio navigation or communications equipment to provide an additional level of safety in case of partial radio failure. A key

requirement of the rule which this proposal would eliminate is that the radio communications and navigation equipment to be used must be capable of transmitting to, and receiving from, at any place on the route, at least one ground facility. Therefore, this proposal would not provide the air taxi passenger the level of safety previously required or currently envisioned by the FAA in considering the mandate in the Airline Deregulation Act of 1978 that air taxis operate with the highest feasible level of safety.

Proposal 558. The proponent suggests that a large transport category helicopter be allowed to operate in VFR conditions without meeting the requirement to have airborne weather radar installed. Part 135 was expanded to incorporate provisions of Part 121 for operations of large transport category aircraft having a maximum passenger seating configuration of 30 seats or less and a maximum payload capacity of 7,500 pounds or less. These requirements have resulted in the high level of safety enjoyed by air carriers operating under Part 121. Airborne radar has been one of these requirements. It is a valuable aid to locating thunderstorm and precipitation areas during VFR and IFR flights.

The proponent does not show that a large transport category helicoper conducting VFR operations, particularly at night would require less instrumentation than a large transport category airplane to achieve the level of safety expected of air carrier/air taxi operations.

Proposal 563. This proposal would have allowed point-in-space approaches to use a weather reporting source at a location approved by the Administrator. Section 135.213(b) presently provides this authorization.

Proposal 565. This proposal would have expanded crewmember testing to include pinnacle operations, confined area work, and the hazards of operating in snow and dust. The proposal also would require demonstrating these operations when substituting the instrument competency check for the competency check.

On January 14, 1980, the Office of Flight Operations issued General Notice N8430.322. This notice provides guidance in air taxi flight tests and identifies maneuvers required. Helicopter pinnacle and rooftop approaches and landings are required when applicable to the certificate holder's operations. The notice also states that alternating instrument proficiency checks may be conducted toward fulfulling the competency check requirements provided the pilot is tested on any additional items required by the competency check.

The FAA has taken the action requested by the NTSB on the items in the proposal with the exception of covering the hazard of operating in snow and dust. The FAA also has issued instructions to the field to request that certificate holders modify their ground training programs under § 135.345 to incorporate these items.

Proposal 566. This proposal would have amended § 135.411(a)(2) by deleting the requirements for helicopters that are type certificated to carry 10 or more passengers to be maintained under a continuous airworthiness maintenance program. The proponent presents two issues which it believes the FAA did not consider regarding the impact this rule would have on the helicopter industry. The first time cited was that because the NTSB did not include helicopters in their air taxi safety study, the recommendations made by the NTSB do not apply to helicopters. The primary objective of the FAA is to upgrade the level of safety for all air taxi operations regardless of the size and type of aircraft, and helicopters were considered during development of this rule. The NTSB study contained 20 recommendations in its report, the majority of which related to the requirements for a properly managed maintenance program, trained personnel, and clearly defined maintenance responsibilities and functions. A review of maintenance-related accidents involving helicopters of all types indicates factors for helicopters that are similar to airplanes. The proponent states that there has not been an accident in the past 15 years involving a helicopter that carries 10 or more passengers where maintenance personnel or maintenance procedures were listed as a causal factor and the requirement of § 135.411(a)(2) would have prevented the accident. To illustrate the aircraft and related accident causal factors, the following are helicopters that carry 10 or more passengers where maintenance-related items were cited. On January 23, 1973, a Bell Model 205A, N–40496, was involved in an accident that indicated that an operation was attempted with known differences in equipment. On August 8, 1964, a Sikorsky S62A, N–987, was involved in an accident. The probable causes were listed as improper maintenance and inadequate inspection by maintenance personnel. The FAA has also considered accidents where the causal factors were maintenance related for helicopters carrying nine or less passengers. The sample included all types of helicopters, including the latest turbine-powered helicopter. There were several accidents where maintenance and maintenance personnel were cited as factors. The FAA, in promulgating the requirements of Part 135, considered the relationship of the passenger-carrying capability in establishing the maintenance requirements. All factors were considered and it was determined that passengers using helicopters should be assured of the same safety aspects as those passengers using airplanes. The proponent also states that there were no commuter helicopters, so the NTSB concern for commuter operations does not apply to helicopters. The FAA records indicate that helicopters have been involved in commuter operations from 5 of the 7 years between 1970 through 1977 when this rule was being developed. It is also interesting to note that although the NTSB Air Taxi Safety Study did not include helicopters, it did provide data relative to helicopter accidents.

In the second issue the proponent states that the FAA failed to properly assess the cost impact of § 135.411(a)(2) on the helicopter industry in accordance with Executive Order 12044. The FAA complied with Executive Order 12044 in assessing the cost impact on the helicopter industry and made reference to this report in Docket No. 16097, Revision to Part 135. The preamble in revised Part 135 states that full documentation of the study and its associated data basis were provided in a three volume report "Cost Impacts of FAR Part 135, Changes to Commuter and Air Taxi Industries," May 1978, by the Aerospace Corporation, and is a part of the docket. The fact that this report did consider helicopters was also stated during the Rotorcraft Review Conference. This report contains economic data in the same specific impact areas as those affecting airplanes. It is assumed the proponent intended to provide a safety parallel by recommending deleting the present maintenance requirements for 10-or-more-passenger-seat helicopters in favor of the maintenance requirements for helicopters that carry nine or less passengers. Section 135.411(a)(2) provides additional maintenance management requirements that are not required for aircraft that carry nine or less passengers. The additional provisions afford a passenger using these aircraft with safety considerations similar to airplane operations under Part 121 or helicopter operations under Part 127. These requirements have proven satisfactory in aircrft used under Part 135 and the proponent has not submitted any justification to warrant changing the

rule to delete the present maintenance requirements for aircraft that carry 10 or more passengers.

Proposal 567. This proposal would have amended § 135.415(c) by deleting the word "shall" and adding the word "encouraged" in its place. The word "shall" in this rule makes it mandatory for an operator to make a determination of a safety item. To "encourage" would only require an operator to submit those items listed and not items that affect safety even if the operator believes safety is affected by a known defect or trend of defects.

Proposal 569. This proposal would have revised § 135.431(a) by removing the requirement for a certificate holder to establish and maintain a system for the continuing analysis and surveillance of the performance and effectiveness of its inspection and maintenance program. The proponent states that continually reviewing a program establishes an effective alternative to determine the effectiveness of an operator's inspection and maintenance program. The FAA does not agree. The proposed review may not be systematic and would only confuse an operator regarding responsibility under this section. To review a program without a requirement to establish a system may prove meaningless and generate nothng more than wasted time and paperwork as sugggested in the proposal. The proponent has not shown sufficient justification to modify maintenance and inspection programs based on its experience in the maintenance and operating environment.

Proposal 571. This proposal would have amended § 45.23(b) to allow an aircraft doing a market survey to be marked "Market Survey" instead of "Restricted," "Experimental," or other already stablished categories, each of which has specific certification rules that must be met. This would, in essence, create a new category of aircraft and no criteria for that category were presented in the proposal. Moreover, a need has not been established to create a new category for market survey aircraft. The term "Market Survey" can be displayed on the aircraft as long as it does not conflict with the other markings required by this section and other sections of this chapter.

Proposals 572 and 573. These proposals would have removed the requirement for the size of markings on the bottom of rotorcraft and would allow the side markings based on the size of surface they were to be affixed to. It also would allow the markings to be placed on the tail cone or vertical fin. On February 14, 1983, Amendment No. 45-14 was issued which accomplished the intent of this proposal (48 FR 11390; March 17, 1983).

Appendix B—Summary of Regulatory Flexibility Analysis

An Initial Regulatory Flexibility Analysis has been prepared for those items with a beneficial economic impact and is contained in the docket. This appendix summarizes that analysis.

Section 133.21 Personnel

The objective of these proposals is to eliminate external-load accidents due to inadequate pilot competence in performing particular operations. Two methods of attempting to ensure such pilot competence (which can be combined) are to require experience, such as through a "trainee" pilot working a certain amount of time with a "qualified" pilot, and through pilot testing by a qualified examiner. Pilot testing might be carried out by FAA employees, designated examiners, or individuals within the particular company performing the external-load operation. Present regulations provide for such testing by a single Chief Pilot. This proposal would allow the Chief Pilot's duties to be delegated to Assistant Chief Pilots to relieve some of the compliance cost burden.

An estimated 179 external-load operators are potentially affected by this proposal. Almost all may be assumed to be small. Benefits may be considered roughly proportional to fleet size, although variations may be expected due to operating territory and other factors. Therefore, to the extent that small operators have smaller fleets than large ones, the $481,000 projected annual cost savings may be expected to average no more than $2,687 per affected operator.

Industry research indicates that over 40 percent of Part 133 certificate holders also hold Part 135 certificates. The total fleet size distribution of Part 133 operators is unknown. Regardless of whether it resembles the distribution of Part 135 or non-Part 135 operators, the relatively high maximum average impact suggests that the threshold of economic impact significance could very well be exceeded by ⅓ of the potentially affected small operators.

Section 133.41 Flight Characteristics Requirements

The objective of these proposals is to reduce accidents resulting from the use of particular combinations of rotorcraft models with certain external loads and external-load attaching devices. Many such combinations of rotorcraft models, external loads, and external-load attaching devices pose a significant risk of accident even when under the control of a competent pilot. The FAA concludes that such confidence can only be maintained when each possible rotorcraft-load combination is successfully demonstrated at least once.

An estimated 164 external-load rotorcraft certificate holders are potentially affected by this proposal. Almost all may be considered small. Benefits may be considered roughly proportional to fleet size, although variations may be expected due to fleet diversity and other factors. Therefore, to the extent that small operators have smaller fleets than large ones, the $340,000 projected annual cost savings and $2,000 annual profit increase may be expected to be no greater than $2,085 per potentially-affected small operator, on average.

As stated previously, industry research indicates that somewhat over 40 percent of Part 133 certificate holders also hold Part 135 certificates. The size of the average impact, however, suggests that the threshold of economic impact significance could well be exceeded by ⅓ of the potentially affected small operators. Section 133.41 is closer to the borderline in this regard than § 133.21.

Cumulative Economic Impact

The proposed changes to Part 43, Appendix A, and §§ 91.23, 133.21, 133.41, 133.51, 135.159, 135.173, and 135.429 refer to different, but partially overlapping, categories of operators.

(1) Part 43, Appx. A—Part 135 operators serving remote areas.

(2) § 91.23—Part 91 operators (not holding Part 135 certificates) flying to some extend under IFR.

(3) § 133.21—Part 133 operators in general.

(4) § 133.41—Part 133 operators in general.

(5) § 133.51—Part 133 operators in general.

(6) § 135.159—Part 135 operators flying to some extent VFR at night.

(7) § 135.173—Part 135 operators using rotorcraft with 10 seats or more.

(8) § 135.429—Part 135 operators using rotorcraft with 10 seats or more.

Although the first and second categories are, by definition, separate from each other, there exists no operator survey data that would allow the determination or reliable estimation of the actual extent to which each of the other categories overlap. It is possible to estimate, however, whether or not it is likely, given the (separate) distributions of fleet size for Part 135 and non-Part 135 operators, that the number of

operators experiencing a significant cumulative net economic impact (positive or negative) from all eight of these proposals would constitute ⅓ or more of the total of individual potentially affected operators, if operator impact were proportional to operator fleet size. To provide the highest possible chance that this number will consititute ⅓ or more, the total of individual operators potentially affected by any of the proposals may be estimated as follows:

Part 135 operators, including all in proposal categories (1), (6), (7), and (8), and 42 percent of those in categories (3), (4), and (5). Note: It is estimated that 42.4 percent of Part 133 operators also hold Part 135 certificates.	358
Non-Part 135 certificate holders, including 57.6 percent of those in proposal categories (3), (4), and (5).	393
Total	751

This estimate maximizes the extent of "overlapping" among relevant categories and increases the chance of ⅓ or more of the total individual operators' experiencing a significant cumulative net impact. It may be noted that such overlapping is not necessarily the most likely representation of actual practice. For example, Part 91 operators that fly under IFR may well not also engage in Part 133 operations, which are generally carried out under VFR.

Even with maximum overlapping of potentially affected small operator categories and given the relatively large number of non-Part 135, and even Part 135, operators that have single-craft or very small fleets, an estimated 217 out of 751 would be expected to bear a significant cumulative impact from the eight proposals. The remaining 534 would not be significantly impacted. The number of small operators expected to be impacted would be less than ⅓ of the total of such operators unless at least 120 of those operators were eliminated by being designated "large" operators. Therefore, it is reasonable to expect that the cumulative net economic impact (positive or negative) of these proposals would not reach significant levels for ⅓ or more potentially affected small operators.

However, the unknown number of proposal category (2) operators that might be eliminated as "large" entities and that might have been expected to be insignificantly impacted could reach as high as 270. Also, those proposal category (2) operators not eliminated might have atypically large fleets and could be significantly affected by proposal (2) alone. Therefore, the possibility exists that the total number of potentially affected small operators could be low enough so that over ⅓ of them would experience a significant cumulative net impact.

(Sec. 313(a), 601, 603, and 604 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421, 1423, and 1424) and 49 U.S.C. 106(g) (Revised, Pub. L. 97–449; January 12, 1983))

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John S. Kern,

Acting Director of Flight Operations.

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